CHIGNIK MANAGEMENT AREA
ANNUAL FINFISH MANAGEMENT REPORT
1994

By

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Regional Information Report[1] No. 4K97-18

Alaska Department of Fish and Game
Commercial Fisheries Management and Development Division
211 Mission Road
Kodiak, Alaska 99615

March 1997

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ACKNOWLEDGEMENT

The authors express their appreciation to seasonal employees: Richard Price, John Cannon, Malcomb Bennett, Martin Hendrich, Iona Fletcher, Tom Vania, Keith Wible, RAPS student Rae Jean Shangin, and pilot Dave Henley who worked many long days and irregular hours to keep the Chignik weir operational. Pete Probasco and Larry Nicholson's aid and supervision during the season were also appreciated. Thanks to Doug Pengilly and Jim Blackburn for biometrics support and review and to Bruce Barrett for his assistance on research issues. Thanks to Jim McCullough and Arnie Shaul for their input on the southern Alaska Peninsula. We also appreciate the assistence from Jim Fall and Lisa Scarbrough on subsistence issues. We also thank Lucinda Neel, Sharon Theis, Joanne Shaker, and Genie Smith for their technical support.

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Introduction

The Chignik Management Area (CMA) includes all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point on the Alaska Peninsula (Figure 1). The CMA is bordered by the Alaska Peninsula Management Area to the west and the Kodiak Management Area to the east. The CMA includes approximately 117 salmon producing streams with the Chignik River system being the largest producer (Figure 2).

The CMA is divided from east to west into five districts, the Eastern, Central, Chignik Bay, Western, and Perryville Districts (Figures 3-4). Within the CMA commercial and subsistence salmon are the economic mainstay for five villages: Chignik Lake, Chignik Lagoon, Chignik Bay, Chignik, Perryville, and Ivanof Bay (Figure 3). Although permit holders and crew members reside in all the villages, shoreside processing is located only in the City of Chignik.

Purse seines are the only legal commercial salmon gear type allowed within the CMA. In 1994, a total of 99 limited entry salmon permits were actively fished in the CMA (Table 1) with 83% of the permit holders claiming Alaska residency (Table 2).

Five species of Pacific salmon are commercially harvested: chinook *Oncorhynchus tschawytscha*, sockeye *O. nerka*, pink *O. gorbuscha*, chum *O. keta*, and coho *O. kisutch* salmon. The Alaska Department of Fish and Game (ADF&G), Commercial Fisheries Management and Development Division (CFM&DD), manages the CMA salmon commercial fisheries to achieve biological escapement goals by species while allowing for an orderly harvest of surplus salmon.

This report adds to a report series which dates back to 1922 and utilizes historic electronic databases data post 1970. Disparities between previously reported catch and escapement statistics and those presented here can be attributed to the editorial objective of providing the most accurate information available.

Overview of the 1994 Salmon Season

The Chignik Lagoon sockeye salmon test fishery and weir escapement numbers did not surpass interim escapement goals as defined by the area management plan (Quimby and Owen 1994a) until June 21 when the commercial fishery was opened. However, a salmon price dispute resulted in fishers striking, delaying the start of the season. On June 25, striking fishers settled with area processors on a sockeye price of $.85 per pound and commercial fishing began. Local processors purchased their last salmon on September 21 due to the salmon market and supply conditions.

The total 1994 commercial salmon harvest (all species) in the CMA was 2.5 million salmon (Tables 3-6), processed by seven companies (Table 7), was approximately 0.3 million fish less than the 1985-94 average catch of 2.8 million fish (Table 8 and Figure 5). Preseason harvest forecasts approximated chum and coho salmon catches while pink and chinook salmon catches were far below the forecast.

The sockeye catch would have approximated the forecast if there had not been a strike until June 25 (Appendix A.1-A.2).

Total salmon escapement in the CMA was estimated at 2.8 million fish. Escapement, primarily for chinook and sockeye, was estimated on the Chignik River by weir counts. Pink, chum, and coho salmon escapements were primarily estimated by aerial survey (Table 9). Sockeye escapement to the Chignik Lakes' System was 966,909 fish, 316,909 over the established escapement goal of 650,000. Pink and chum escapement to most streams was rated from adequate to above average.

The exvessel value of the 1994 commercial salmon harvest was $11.8 million dollars, about $5.0 million dollars less than the 1985-94 average exvessel value of $16.9 million dollars (Table 10 and Figures 6-7).

Chinook Salmon

Background

Chinook salmon production in the CMA is primarily limited to the Chignik River system, which is the largest chinook salmon system on the south side of the Alaska Peninsula (Figure 2). There is no directed Chinook salmon fishery within the CMA. However, chinook salmon return primarily during July and August with peak harvests, generally in July, occurring incidental to sockeye salmon catches.

Chinook salmon runs (catch and escapement) have ranged from a low of 409 fish in 1961 to a high of 21,461 fish in 1993 (Table 11 and Figure 8). The recent 10-year average run has been 10,098 fish. Commercial catches have increased from an average of 1,378 fish (1963-1972) to 6,574 (1985-1994) (Table 8). A corresponding increase in escapement has also occurred within the past ten years (Table 11). Although a preliminary total escapement goal of 1,900 fish has been established, it is based on minimal and incomplete brood table information. This escapement goal includes 1,400 for spawning purposes and 500 that are estimated as sport fish removals.

1994 Management

The CMA chinook salmon harvest was 3,919 fish, the eighth highest from 1960 and a decrease of 2,655 fish from the 1985-1994 average of 6,574 (Table 11 and Figure 8). The harvest occurred from June 25 to September 7 with a peak harvest of 252 on June 29 (Table 4).

The total exvessel value of the 1994 chinook salmon harvest was estimated at $38,096, averaging $385 per permit holder (Table 10 and Figure 6-7).

The 1994 chinook salmon escapement of approximately 3,016 fish was approximately 508 fish less than the 1985-94 average escapement (Table 11) and about 1,100 fish above the escapement goal of approximately 1,900 fish. However, the escapement counts were not adjusted for chinook salmon removed by the sport fishery, those that spawn below the counting weir, or escapement after the weir is removed.

Sockeye Salmon

Background

Economically, sockeye salmon are the most important commercial salmon species in the CMA. The commercial salmon fishery targets two runs of sockeye salmon that return to the Chignik Lake and Black Lake systems. Sockeye salmon destined for the Chignik-Black Lakes system are also intercepted outside the CMA in two historic fisheries: east in the Cape Igvak Section of the Kodiak Management Area; and west in the Southeastern District Mainland of the Alaska Peninsula Management Area.

Although most CMA sockeye salmon production originates from the Chignik-Black Lakes system, some spawning activity does occur in the Eastern District, primarily in the Aniakchak River tributaries (Albert Johnson Creek) and Surprise Lake. Tagging studies conducted over several years in the Aniakchak Bay and Cape Kumlik areas, indicate that sockeye salmon harvested in these waters are almost exclusively bound for the Chignik-Black Lakes system (Lechner 1969). Consequently, the Eastern District management strategy is based on the run strength of the Chignik-Black Lakes systems and opens during June concurrently with the Chignik Bay and Central Districts. This management strategy has been approved by the State of Alaska Board of Fisheries and put into regulation as the Eastern District Management Plan (5 ACC 15.360) (ADF&G 1992-1994 edition).

Sockeye salmon escapement goals were 400,000 fish for Black Lake and 250,000 fish for the Chignik Lake stocks. Commercial fishing time for sockeye salmon has been regulated based on achieving interim threshold escapements goals by specific dates for each run. Achieving these thresholds is complicated due to overlap of the two runs. This run timing overlap (the transition period) generally occurs during the latter part of June to early July .

Annually, June 26 through mid July is the period of transition from early run (Black Lake) to late run (Chignik Lake) fish. Management biologists must assess the catch using age and stock composition to determine which stock dominates during this period. Sampling effort is increased from once a week to every third day to assess the changing age and stock composition. Subsequent to sampling results, fishing time may be increased to harvest early run fish or may be decreased to allow time for evaluating the late run strength.

Two methods have been developed to estimate the daily proportion of each run during the transition period. The first is based on tagging studies conducted from 1962-1966 (Dahlberg 1968). These studies allowed biologists to develop an average time of entry (ATOE) curve to apportion the two Chignik sockeye salmon runs into the early and late run components. The second method is based on differential growth between juvenile salmon rearing in Black Lake and Chignik Lake (Burgner and Marshall 1974, Conrad 1983). Sockeye salmon fry rearing in Black Lake (early run) emerge earlier and grow at a faster rate than fry rearing in Chignik Lake (late run) (Narver 1966). The disparity in growth rates between Black Lake and Chignik Lake juvenile salmon is reflected in their scale patterns, which when measured, provide the variables used to separate Black Lake from Chignik Lake sockeye salmon stocks.

This latter method, scale pattern analysis (SPA), is currently used inseason and postseason to assign sockeye salmon to their stock of origin. After the sockeye age composition is determined, models for the dominate age classes (age-1.3 and 2.3) are constructed using two types of functions: linear

discriminate (LDF) and quadratic discriminate (QDF). The model that provides the highest balanced classification accuracy is then selected for stock apportionment.

General results from SPA analysis indicate that the Black Lake run occurs between late May until late July, peaking in the third week in June. By contrast, the Chignik Lake run starts in late May and peaks in late July, but can continue at diminished levels through November. Subsistence users have noted a February spawn of a few sockeye salmon in springs of the Clark River (Figure 2). These generalizations are corroborated, not only by scale pattern analysis, but from weir escapement data on the Black River and from tagging studies (Dahlberg 1968).

In practice when constructing SPA models, the sockeye stocks are apportioned using scales that are randomly sampled from the Chignik Lagoon commercial fishery (unknowns, n=100). The standards (knowns, n=200) are seined from the outlet of Black Lake (early June) and sampled from the Chignik Lagoon commercial fishery (post July 30) when approximately 100% of the salmon are destined for Chignik Lake. However, when the first run is proportionally much larger than the second, the Black Lake run may constitute a greater proportion of the escapement after July 30 than is not now being modeled. In short, fish could be apportioned to Chignik Lake rather than to Black Lake because the current computer program assumes July 30 as 100% apportionment to Chignik Lake.

Inseason estimates, based on standards collected from Black Lake in June and from the previous year's post July 30 age-2.2 fish, represent this year's age-2.3 Chignik Lake sockeye salmon. Inseason estimates for age-1.3 fish are not possible because the previous year's post July 25 age-1.2 salmon are too scant to create adequate standards. Therefore, postseason estimates are considered more accurate than inseason because they include standards for both major age classes (age-1.3 and 2.3).

Age composition of the Black Lake run is typically dominated by ages-1.3 and 1.2 fish, and the Chignik Lake run by ages-2.3 and 2.2 fish. Historically, it is unusual for the early run to have many age-2.2 fish or the late run to have a very large percentage of age-1.2 fish (Conrad 1983).

The preseason Black Lake run forecast is based on the historical relationship between the prior year's total return of age-1.2 fish, the average length (mid-eye to fork of tail) of the prior year's age-1.2 male fish, the parent year escapement, and the magnitude of the age-1.3 and 2.3 run component. These variables are used within a multiple linear regression forecast model (Appendix A.1-A.2).

The Chignik Lake (late run) forecast has historically been variable in its accuracy and construction of a model, such as the one used for Black Lake (early run), has been unsuccessful. The late run forecast estimate is based on an average return per spawner estimate for each age class represented for years post 1969 (Appendix A.1-A.2).

Spawning distribution of the sockeye escapement is determined by aerial surveys, which have been conducted almost every year since 1960.

1994 Management

The Chignik River weir is located three miles upstream from Chignik Lagoon and during 1994 was operational from May 31 through August 14. To insure that the weir remained fish tight until removal,

weekly maintenance dives using scuba gear were made on the weir face to repair damage or check erosion beneath the aluminum panels and to clean video cameras.

Fishery Chronology

Early June Inseason Management of Chignik Sockeye Salmon. Annually, in accordance with the annual management plan, commercial sockeye salmon fishing begins if the cumulative sockeye salmon escapement exceeds 40,000 fish prior to June 12 and is accompanied by a strong buildup of sockeye salmon within Chignik Lagoon (Quimby and Owen 1994a). The cumulative escapement through June 13 of approximately 51,000 sockeye salmon was above the desired interim escapement goal of 40,000 sockeye salmon by June 12 (Table 13). However, test fisheries on June 12, 14, 16, and 18 did not indicate a harvestable buildup of 40,000-60,000 sockeye salmon in Chignik Lagoon (Table 4). But the test fishery of June 20 indicated a harvestable buildup and an escapement of approximately 290,000 fish, 90,000 above the June 20 interim escapement goal.

These criteria prompted a commercial fishery opening in the Chignik Bay District. When the Chignik Bay District opens in June, the Eastern and Central Districts must open concurrently as approved by the State of Alaska Board of Fisheries and put into regulation as the Eastern District Salmon Management Plan (5 AAC 15.360) (ADF&G 1992-1994 edition). This first opening, from 4:00 p.m. June 21 through 4:00 p.m. June 22, was not fished by the entire fleet because the Chignik Area commercial fishers went on strike for higher sockeye salmon prices. Consequently, the fishing period was extended from June 22 until further notice.

Although on June 21 vessels were selected to fish for "strike fund" moneys, the entire fleet did not fish until after the strike ended at 12:01 a.m., June 25. The Chignik Bay and Central Districts remained open until further notice which was from June 25 until July 14. The Eastern District remained open until further notice from June 25 and closed on June 29 to evaluate the transition period between the first and second runs as stated in the Eastern District Salmon Management Plan (5 AAC 15.360) (ADF&G 1992-1994 edition).

Inseason Scale Pattern Analysis of Chignik Sockeye Salmon. During 1994, run transition occurred on July 15, as determined by inseason scale pattern analysis (SPA) and age composition data. The highest and most balanced inseason SPA model was the linear discriminate function (LDF) for age-2.3 sockeye, and it had a mean classification accuracy of 85%. Scale samples (9,920) collected from the commercial fishery in Chignik Lagoon were utilized to determined age composition. The proportion of age-1.3 fish (peak=48%), was lower in 1994 as compared to other years (Tables 14-16 and Figure 9). Age-1.2 fish were not abundant, peaking at 17.8% on June 16. Late in the run age-2.3 fish represented a smaller proportion of the age composition than experienced most years while age 2.2 at 32.6% and age 3.3 at 25.9% peaked on August 24.

High catch and escapement numbers from mid June through July 27, age composition, and SPA analyses (late 50/50% transition date of July 15) supported the conclusion that the 1994 season could be characterized as having an above average first run with a very weak second run (Table 4 and 16). Therefore, the Chignik Bay and Central Districts remained opened to commercial salmon fishing until further notice because inseason SPA indicated a high proportion of Black Lake sockeye salmon during early to mid July, and the scheduled escapement goal of 400,000 sockeye salmon for the first run was attained by June 22. By specific date, the Eastern District opened to commercial salmon fishing July 9,

and after the transition date was determined to be July 15, left open until further notice. In late July, the percentage of age-2.2 and 3.3 fish rapidly increased over previous samples and the average weight and total commercial catches decreased, indicating a greater proportion of second run fish. From late July on, the management priority shifted towards the second run

The Western (except the Mitrofania Section) and Perryville Districts opened to commercial salmon fishing July 9 for 66 hours until July 12. The total sockeye second run escapement on July 8 was approximately 57,000, ahead of the scheduled goal of 50,000-60,000 sockeye salmon by July 12 (Table 16).

The Mitrofania Section closure was based on historical catches of immature salmon during early July. Public concerns prompted a test fishery at Mitrofania Island by one vessel on July 9. The purse seine test sets produced few immature salmon, and the Mitrofania Section was opened from July 10 until July 12.

Due to inclimate weather on July 9 and sockeye escapement on July 11 of 61,000, that surpassed the upper end of the interim second run escapement goal of 60,000 on July 12 (Table 16), the Eastern, Western, and Perryville Districts were extended for another 24 hours until July 13. The Chignik Bay and Central Districts remained open until further notice. Additionally, average daily catches of sockeye salmon were continuing strong at approximately 26,000 fish per day.

The entire CMA was closed to commercial salmon fishing on July 14 and fishers were put on a 12-hour notice. The closure was necessary as escapement began to lag (1,500 fish per day) to achieve the second run sockeye interim escapement goal of 65,000 -75,000 by July 14 (Table 16).

Late Inseason Management of Chignik Sockeye Salmon. A test fishery conducted on July 17 did not show any appreciable harvestable buildup of salmon in Chignik Lagoon, and the escapement of approximately 79,000 was behind the escapement goal of July 16 of 80,000-90,000. However, by July 18 escapement increased to about 102,000, and was expected to exceed the upper second run interim goal of 115,000 by July 19 (Table 16). This warranted a 24-hour fishery in the Chignik Bay and Central Districts beginning July 19. Although aerial chum survey numbers in the Western, Perryville, and Eastern Distircts warranted a 60-hour fishery in the Western and Perryville Districts, the Eastern District remained closed due to a lack of adequate chum salmon escapement.

The Chignik Bay and Central Districts opened to commercial salmon fishing for 24 hours on July 23, and then extended 48 hours until July 26 to prevent overescapement. The second run escapement on July 23 and July 24 of approximately 176,000 and 179,000 sockeye salmon achieved the upper end of the interim escapement goal of 180,000 for July 26 (Table 16). The Eastern, Western, and Perryville Districts remained closed due to inadequate escapement of pink and chum salmon.

The Chignik Bay, Central, and areas south of a line drawn from cape to cape in the Western and Perryville Districts opened to commercial salmon fishing for 48 hours on July 28. The inner bays of the Western and Perryville Districts and the entire Eastern District were closed to commercial salmon fishing due to inadequate pink and chum salmon escapement into those streams.

On August 2, second run sockeye escapement through the weir was approximately 222,000 exceeding the July 31 second run sockeye salmon interim goal of 200,000. On August 3, a 48 hour opening was

initiated for the Chignik Bay and Central Districts and south of a line drawn from cape to cape in the Western and Perryville Districts, while the Eastern District remained closed. The escapement goal for the second run is 250,000 sockeye salmon by the end of the season, October 31.

By August 5, the Central, Western, and Perryville Districts were closed to all commercial salmon fishing due to low pink salmon escapement and catch numbers. The Chignik Bay District remained open for another 48 hours because the previous three days' escapement was averaging 4,100 sockeye salmon with total escapement standing at 231,000 fish.

After August 9, because many streams in the Eastern, Western, and Perryville Districts experienced low water conditions, fishing was curtailed in those areas and restricted to the Chignik Bay and Central Districts. This enabled managers to evaluate second run sockeye salmon and the coho salmon entering local bays. From August 9, weekly fishing periods of 72 hours (Tuesday through Friday) were scheduled in the Chignik Bay and Central Districts until the end of the commercial fishing season.

Although, the regular commercial salmon fishing season is closed by regulation on October 31, the regular season was prematurely closed because of a small late sockeye run and market conditions. Local processors purchased their last salmon on September 21.

The exvessel value of the sockeye salmon harvested in the CMA was approximately $10.0 million dollars (Table 10 and Figure 6). The average value per permit holder was $101,477 (Figure 7).

Cape Igvak Sockeye Salmon Fishery. The Cape Igvak fishery harvested an estimated 250,230 Chignik bound sockeye salmon through July 25 (Table 17). This represented 12.3% of the total Chignik salmon harvest through July 25, 2.7% less than the 15.0% allocated by regulation (ADF&G 5 AAC 18.360. Cape Igvak Salmon Management Plan) (ADF&G 1992-1994 edition). Chignik bound harvest after July 25 in the Cape Igvak area were estimated at 7,600 sockeye salmon for a total season harvest of 257,830 fish (Table 18).

Southeastern District Sockeye Salmon Fishery. The Southeastern District Mainland fishery harvested an estimated 142,350 Chignik bound sockeye salmon through July 25 (Table 17). This represented 7.0% of the total Chignik salmon harvest through July 25, right on the 7.0% allocated by regulation (ADF&G 5 AAC. 09.360 Southeastern District Salmon Management Plan) (ADF&G 1992-1994 edition). Catches of Chignik bound sockeye salmon in the Southeastern District Mainland area after July 25 were estimated at 84,212 for a total of 226,562 sockeye salmon (Table 18).

Post season Scale Pattern Analysis of Chignik Sockeye Salmon. Postseason SPA age-1.3 and 2.3 models, that were used to assign sockeye salmon to Black Lake or Chignik Lake, were created using linear (LDF) and quadratic (QDF) discriminant functions to evaluate which type of analysis would provide the best classification accuracy. The linear discriminant models for the age-1.3 and 2.3 sockeye salmon provided the highest balanced classification accuracies of 76% and 72%. Estimates using these models were assigned as percent composition to Black Lake or Chignik Lake for each commercial sample (Tables 19-20). Linear interpolation of percent composition between sample dates was calculated for catch and escapement values and adjusted to Chignik Lagoon dates (Table 21) resulting in daily escapement and catch estimates for each stock (Tables 22-23).

The Black Lake sockeye salmon postseason SPA escapement estimate of 769,464 was 87,005 fish more than the inseason estimate (Table16 and 24). The Black Lake escapement almost doubled the season's escapement goal of 400,000 with 369,464 fish classified as overescapement.

The Chignik Lake postseason SPA escapement estimate to August 14 was 163,082 fish, 84,525 fish less than the inseason estimate. Total Chignik Lake escapement includes not only fish counts estimated through the weir but also post weir estimates that are based on statistical analysis of the ratio of the Chignik Lagoon sockeye catch to escapement prior to weir removal. This relationship is then extrapolated to post weir escapement as long as the commercial fishery continues. The estimated escapement until the commercial fisheries end on September 21 was 197,445 fish, 52,555 fish less than the 250,000 Chignik Lake escapement goal (Table 25).

The discrepancy between the inseason and postseason estimates occurred because the historical scale pattern analysis apportionment curve that was selected, exhibited the latest transition date (July 15) that had been apportioned since the initiation of Chignik sockeye scale pattern analysis in 1978. This curve was then modified to simulate inseason stock composition estimates for 1994. However, the Chignik Lake run, when compared to the Black Lake run, was proportionally the weakest on record since 1978 and the model misassigned sockeye salmon to Chignik Lake. In short, the postseason SPA model shifted the transition date (50/50 stock composition) from the inseason estimate of July 15 to July 28 (Figure 10).

However, in 1994 there was another probable source of error. The Black Lake run was proportionally much larger than the Chignik Lake run. SPA determined that the age-1.3 sockeye salmon were actually in high proportions until August 10 rather than July 30, the assumed cutoff date (Tables 19-20). Fish could erroringly be apportioned to Chignik Lake rather than to Black Lake because the current computer program design assumes July 31 as 100% apportionment to Chignik Lake.

Major age classes (in percent) as determined by SPA contributed to the escapement and catch of the Black Lake run as follows: age-1.3 (40.1% and 45.6%); age-1.2 (6.8% and 5.3%); age-2.3 (42.1% and 39.9%); age-2.2 (7.7% and 5.3%), age-3.3 (1.3% and 1.4%)(Table 24 and 26). Major age classes (in percent) as determined by SPA contributed to the escapement and catch of the Chignik Lake run as follows: age-2.3 (31.7% and 28.3%); age-1.3 (36.7% and 39.6%); age-1.2 (4.7% and 3.3%); age-2.2 (14.8% and 15.0%) and age-3.3 (9.2% and 10.6%) (Table 25 and 27).

In years like 1994, where the Black Lake run size proportionally overwhelms the Chignik Lake run and also has a high proportion of age 2.3s, there is a high probability that inseason and postseason modeling misassigns sockeye salmon age classes to a stock. For instance in 1994, no age-3.3 sockeye salmon were caught at Black Lake but postseason analysis assigned 31,613 to Black Lake. This is a highly unlikely event, since from 1978, only 4 age-3.3 sockeye salmon have actually been caught at the Black Lake outlet (Tables 14 ,15, 24, and 26).

Total salmon misassigned to stock are for most years insignificant, but any source of error should be corrected. Before the program change is initiated, a comprehensive database approach should be analyzed.

In summary, the 1994 sockeye salmon run for Black Lake was 2.4 million fish and for Chignik Lake was 0.7 million fish. Total escapement to both lakes was 966,909 sockeye salmon, an overescapement

of 369,464 above the 400,00 Black Lake escapement goal and an underescapement of 52,555 below the Chignik Lake escapement goal. Total sockeye harvest and escapement was 3.1 million fish (Tables 28-30; Figures 11-12). This was within the forecasted range of 2.0 to 3.4 million total fish return (Appendix A.1-A.2).

Pink and Chum Salmon

Background

Pink and chum salmon production in the CMA is characterized by variable escapements and calculated returns per spawner for both species (Tables 31-46). These variabilties could be attributed to the physical morphology of the river and stream systems, which are characterized by loose substrates and steep gradients. These systems are impacted by fall, winter, and spring floods which cause streambed scouring, and can result in high egg and fry mortality.

Openings in the Eastern, Western, and Perryville Districts from early July through August depends primarily on the abundance of pink and chum salmon. Whereas, openings in the Central and Chignik Bay Districts are based primarily on a directed fishery on the Chignik Lakes' sockeye salmon where pink and chum salmon are caught incidentally.

Management of the CMA pink and chum salmon fisheries is based on inseason aerial assessment of escapement (conducted annually from 1953) (Table 47), and catch per unit effort (CPUE) data. Aerial surveys of approximately 117 salmon streams, adjacent bays, and stream mouths are taken periodically throughout the season to provide the most current inseason indices of escapement (Table 48).

There have been problems with harvests of immature chum and sockeye salmon in past years, which have prompted commercial salmon fishing closures in the Mitrofania Section of the Western District in early July.

Currently, all salmon processed locally are for the fresh frozen market because there are no operational canning facilities. Consequently, to provide the quality required for fresh frozen processing, the fisheries are managed to intercept migrating fish prior to, or just as they reach terminal waters.

1994 Management

The 1994 projected harvest of pink and chum salmon was 1.3 million pink salmon and 200,000 chum salmon (Appendix A.1). The projected return of pink salmon was based on the parent even year escapement in 1992, and was driven by average escapements to the Western and Perryville Districts and above average escapement to the Central and Eastern Districts. An aggressive management strategy was anticipated early in the season prior to aerial assessment of salmon in bays, stream mouths, and streams.

The Eastern District was opened concurrently with the Chignik Bay and Central Districts on June 21. While the Chignik Bay and Central District remained open until July 14, the Eastern District closed on June 29 to assess the sockeye salmon second run during the transition period as mandated by the Eastern District Management Plan (5 AAC 15.360) (Quimby and Owen 1994a). Catches in the Chignik

Bay and Central District from June 21-July 14 were 58,837 pink and 54,003 chum salmon (Table 5). In the Central District, Kujulik Bay remained closed most of the season to allow for pink and chum escapement into bay streams. There was little effort expended in the Eastern District from June 21-29 with catches totaling only 5,867 pink and 2,559 chum salmon.

Openings in early July in the Eastern, Western and Perryville Districts are used to provide an early assessment of pink and chum salmon run strengths. On July 9, the Eastern District was reopened, and the Western (except the Mitrofania Section) and Perryville Districts were opened for the first time during the 1994 commercial salmon season. The Mitrofania Section was opened on July 10, when purse seine test sets indicated small numbers of immature fish. The Eastern, Western, and Perryville Districts were extended until July 13. Collectively in the Eastern, Western, and Perryville Districts; 55,735 pink and 28,223 chum salmon were caught from July 9 to July 13.

All fishing was closed July 14 to allow for sockeye salmon escapement to the Chignik River and for pink and chum escapement to all other districts. As interim escapement goals were met, all districts reopened on July 19 except the Eastern District. It remained closed during the remaining days of July and all of August because of poor stream escapement. The Chignik Bay and Central District closed on July 20 and then reopened from July 23-26 and July 28-30 when sockeye escapement surpassed interim goals. The Western and Perryville districts closed July 21 and then reopened from July 28 to July 29 to allow fishing for pink and chum salmon. The Chignik Bay and Central Districts produced 54,076 pink and 11,706 chum salmon from July 19-30. In the Western and Perryville Districts 73,675 pink and 28,658 chum salmon were caught from July 19-21, and 78,344 pink and 29,658 chum salmon were caught from July 28-29.

The Chignik Bay and the Central Districts were opened four times to fishing during August: August 3-6 (yielding 22,233 pink and 4,260 chum salmon), August 9-12 (yielding 85,360 pink and 81,052 chum salmon), August 16-18. (yielding 4,758 pink and 5,049 chum salmon), and August 23-26 (yielding 2,641 pink and 5,470 chum salmon)

The Western and Perryville Districts only opened twice during August when early August's aerial surveys indicated insufficient pink stream escapement as compared to escapement over the previous 10 years. When opened, bays were closed in the Western and Perryville Districts northwest of a line drawn between Alexander Point, Itki Point, and the Road Island markers in Ivanof Bay to enhance escapement. The commercial fishery produced catches on August 3-4 of 68,563 pink and 36,410 chum salmon. For the Western and Perryville Districts, only the Castle Cape Section of the Western District opened during the rest of August, from August 23-26, where 4,179 pink and 5,783 chum salmon were caught. After August 30, management priorities changed from pink and chum salmon to coho salmon.

The total catch of 431,063 pink salmon was below the projected 1.30 million pink salmon harvest, and below the 1985-1994 average of 943,000 fish (Tables 8, 36 and Appendix A.1). The largest catch came from the Western District, totaling 174,641 fish, and the smallest catch coming from the Eastern District, totaling 12,952 fish. The projected harvest for pink salmon was not attained because the pink salmon run was weaker than expected.

The 1994 CMA pink salmon estimated total escapement of 1,383,481 fish was based on the area-under-the-curve method (Johnson and Barrett 1988; Tables 9, 36 and Figure 13). The escapement in the Eastern District of 863,250 fish was more than double the average of 129,190 fish for the past 30 years.

Escapement to the Chignik Bay District was almost four times more than average of 19,500 fish at 75,800 pink salmon, while the Central District was slightly above the average of 161,000 pink salmon with 178,920 fish escapement within the past 30 years (Tables 31-32). The escapement for the Western District of 111,630 fish was slightly less than the 30 year average of 140,000 fish, while the Perryville District escapement of 153,881 fish was slightly more than the 30 year average of 134,000 fish (Tables 34-35).

The CMA chum salmon catch and escapement was 227,276 and 382,352 fish (Table 42; Figure 14). The CMA harvest was slightly above the forecasted harvest of 200,000 fish, and considerably above the 1985-1994 average harvest of 169,898 fish (Appendix A.1 and Table 8). Most chum salmon were harvested in the Western and Central Districts. The chum salmon escapements to the following districts of the CMA are as follows: Chignik Bay (1,500), Central (102,633), Eastern (129,190), Western (23,000), and Perryville (126,029) (Tables 37-41).

The exvessel value of the pink and chum salmon harvested within the CMA was $226,504 and $430,888 (Table10 and Figure 6). The average value per permit holder was $2,208 for pink salmon and $4,352 for chum salmon (Figure 7).

Coho Salmon

Background

Although a directed fishery in the CMA for coho begins late August to early September and mainly in the Chignik Bay District, coho salmon are also harvested incidentally in the directed sockeye, pink, and chum salmon commercial fisheries. Outside of the Chignik Bay District, the Western District has produced, for most years, the highest coho catches (Figure 15). Coho salmon are caught as early as June until the fishery closes, which could run by regulation until October 31. Total catches for the years 1976 to 1994 have ranged from 17,430 to 370,400 fish with an overall trend from 1960 of increasing catches (Table 8 and Figure 16).

Coho catch distributions have recently appeared bimodal with a peak in late July during the targeted pink and chum fisheries, and a second one in late August to early September (Tables 4-5). The early coho catches, occurring primarily in the Western and Perryville Districts, have similar average weights to those caught early in Chignik Lagoon but lower than that caught in Chignik Lagoon in late August and early September (Tables 5-6).

The Chignik Lakes' coho run is the largest run within the CMA and within the entire Westward Region. In the Chignik lakes system (from 1984-1994 except 1989, the oil spill year) escapement has averaged 79,552 and catches within the Chignik Bay District has averaged 77,887. Other areas of high concentration of coho escapement are in Ivanof Bay in the Perryville District and several streams in the Eastern District.

No direct estimates of coho escapement in the Chignik Lakes system are available because the weir is removed prior to the start of the coho salmon run, and aerial survey counts are limited. However, escapement of coho salmon was estimated from the relationship of sockeye catches to sockeye escapement and extrapolated to coho salmon. Overall, escapement monitoring of coho salmon in the

Chignik Area is sporadic due to the late timing of the run and logistics involved in monitoring the many streams in the area.

Harvest projections for Chignik Bay and outside catches are based on a 10-year average. Coho harvests may be affected by the strength of the Chignik Lake sockeye run and the strength of the pink and chum runs. For example, a weak sockeye second run (Chignik Lake) or a weak pink and chum run could severely curtail those fisheries and consequently, the incidental harvest of coho salmon.

1994 Management

A total of 237,204 coho salmon were harvested in the CMA in 1994, the fourth largest harvest on record (Table 8 and Figure 16). This catch was about 37,000 fish more than the harvest projection of 200,000 fish. Most of the coho catches (Tables 3, 8 and Figure 15) were in the Chignik Bay and Western Districts, with a peak overall catch of 20,552 fish on August 30 (Tables 4-5).

Escapement to the Chignik Lake system was estimated at 55,483 fish. Aerial surveys of CMA streams in early September were nonexistent due to inclement weather conditions. However, aerial surveys in late August in the Eastern District showed and escapement of 31,700 coho salmon (Tables 9 and 47).

The exvessel value of the CMA coho salmon harvest was $1,094,415 (Table 10 and Figure 6). The average value per permit holder was $11,055 (Figure 7).

Subsistence Salmon Fisheries

The CMA villages of Chignik, Chignik Lake, Chignik Lagoon, Perryville and Ivanof Bay rely heavily on local resources for subsistence. Salmon subsistence permits are issued to people in these villages through the Kodiak and Chignik ADF&G offices, Village Public Safety Officers, processors, and Subsistence personnel on assignment from the Anchorage ADF&G office. In 1994, 56% of the Chignik Area subsistence permits issued were returned with harvest data. The ADF&G Subsistence Division estimates harvests by a stratified expansion design for each community. In 1994, the CMA subsistence harvest was estimated at 165 chinook, 13,978 sockeye, 4,055 coho, 1,720 pink, and 382 chum salmon (Table 49).

Special Research Projects

Video Counting Feasibility Study

A complete video counting system was purchased for the 1994 field season at Chignik. The monitor and two VCRs were set up in the Chignik office and were connected to the underwater video camera at a fish counting gate by television cable. An independent light source was also installed so that salmon could be observed 24 hours a day.

Camera and light mounts were added on to an existing weir counting gate.. The camera and light could be mounted both horizontally (for a side view of the fish) and perpendicularly (for a top view of the

fish) providing for experimental viewing versatility in turbid water. This experiment indicated that the side view provided for the best counting resolution and clarity.

In fact, the clarity of the image on the monitor was excellent. Individual scales could be seen; the lateral line was very distinctive; sea lice could be seen near the anal fin; the pores near the eye could be distinguished; and colors were sharp which aided in the identification of salmon. If there were any questions concerning numbers or identification of salmon, there was always the option to review the section of tape in question.

The VCR recorded all passage of fish and animals 24 hours a day on super VHS tapes. Tapes were changed every morning at 7:00 a.m.. In between live counts, the previous day's ten minute hourly counts could be reviewed on a second VCR and corrected if any errors were found. The reviewing VCR enabled the viewer to fast forward through blank spots containing no fish, to review previous sections of tape; to advance the tape at normal speed; or to view the tape by frame when fish numbers or species identity were in doubt.

Procedurally, salmon were daily enumerated, identified, and recorded live from the monitor inside the office at the top of each hour for ten minutes from 7:00 a.m. until 10:00 p.m. The daily night time counts, from 11:00 p.m. to 6:00 a.m., were taped and then counted later between 7:00 am and 8:00 a.m. All ten minute counts were recorded and then expanded to the entire hour count.

Another use for the camera, in the future, might be to enumerate outmigrating smolt. Smolt were easily seen going by the camera. Some modifications, such as leads and chutes, might improve the accuracy of enumerating smolt.

One the of problems encountered this season was that initially the camera housing seal was found loose. The camera unit was sent back to the factory to be properly vacuum sealed. Consequently, salmon counting for the first five days was conducted by the old method, by standing above the counting gates on the catwalk and manually counting salmon through the weir. The camera suffered no other malfunctions throughout the remainder of the season.

Another problem with the camera was that the mounted gate had to be constricted in order to insure passage of fish through the camera's field of vision. This also reduced the rate of passage of fish through the weir. On one occasion, a second gate was opened up in conjunction with the camera gate to prevent a buildup of fish behind the weir. Counts through this second gate were conducted by the old method. The planning and purchase of a second camera for the 1995 field season will correct this problem.

Also, a problem was encountered when salmon occassionally struck the independent light source, and that impact would break the bulb's quartz element. Next season, the lamp attachments will be recessed so the salmon can not hit the bulb.

An occasional power outage would interrupt the recordings for the short time that it would take to get a generator back on line. An occasional piece of moss or seaweed would hang up on the camera lens and partially obstruct the view, and have to be removed. Other than the aforementioned problems, the entire unit was maintenance free the entire season.

Resource Apprenticeship Program for Students

The Chignik Area Finfish Management Biologist was approached prior to the 1994 field season by a representative of the Bureau of Land Management (BLM) to consider apprenticing a high school student as a fish and wildlife technician for the field season. BLM sponsors the Resource Apprenticeship Program for Students (RAPS) by placing a student in a career field choice and by providing for the salary and insurance. High school councilors help students determine what field they may want to pursue and suggest different summer work opportunities through the RAPS program.

This manager accepted one high school student from the RAPS program who attended the Chignik Lake High School. The RAPS student, Rae Jean Shangin who is a highschool junior, was born and raised in the Chignik Lake Village and was aware of the weir all of her life. Her duties were exactly the same as other Fish and Wildlife Technicians at the weir. Her first day of work was June 13 and her last day of work was August 18. She commuted to work every day from her home in the village and never missed a day of work, nor was she ever late for work.

This manager feels that the RAPS program should continue at the weir because it provides an opportunity for a high school student to get insight into the career field he or she has chosen. There is also the opportunity to provide some income to the local economy. This program greatly benefits the department because the student goes home with his or her experiences of the day and relates them to family and friends; inadvertently, educating the local people about the department's purposes and goals.

CHIGNIK HERRING FISHERIES

Background

The earliest recorded herring fishery in the Alaska Peninsula region was in 1906. Although during the early herring fishery, Chignik area catches were combined with catches from North and South Peninsula areas and labeled as Southwestern Alaska catches, annual herring catches did not exceed 500 tons. These herring were harvested with beach seines and marketed as a salted product. This early herring fishery ceased in the late 1930's and did not commence again until 1980, with the sac roe herring fishery.

Since 1980, the Chignik area sac roe herring fishery has been a low effort, low yield fishery (Figure 17). Prior to 1984, harvests were concentrated in the Big River Section of the Eastern District. This area was closed to commercial herring fishing in 1985 and has remained closed to protect depressed stocks. This closure shifted effort into other areas of the CMA but with low yields.

Herring spawning schools that are in small geographic areas, generally a bay or lagoon, are managed as discrete stocks. The projected annual harvest for each of these stocks is dependent on the previous year's biomass estimates at an exploitation rate of 0-20% (Quimby and Owen 1994b). Preseason harvest projections may differ from actual harvest levels if inseason information (aerial surveys, catch per unit effort) suggests that the spawning biomass of a discrete stock differs significantly from anticipated levels.

1994 Management

There was no commercial sac roe herring fishing effort during the 1994 season because of low abundance levels and a reluctance of processors to purchase local herring.

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Table 1. List of permit holders who fished in the Chignik Management Area, 1994.

	Name		Permit No.	Residency	Vessel Name	ADF&G No.
1	ALECK	NICK	S01L56935 J	R	TIFFANY NICHOLE	54974
2	ALEXANDER	JASON	S01L59000 W	NR	CAPTAIN JAY	21757
3	ANDERSON	AARON	S01L56203 U	R	VENTURE	33848
4	ANDERSON	AL	S01L57160 U	R	ALYSA JUNE	61634
5	ANDERSON	DAVID	S01L56415 U	R	GYPSY LADY	61550
6	ANDERSON	DEAN	S01L60114 M	NR	SIERRA GALE	60913
7	ANDERSON	EUGENE	S01L60601 G	R	RAY MAR	31492
8	ANDERSON	GEORGE	S01L57133 E	R	ALICE A	33375
9	ANDERSON	H.	S01L57501 K	R	JANET LYNNE	53370
10	ANDERSON	JULIUS	S01L55433 H	R	CHRISTINA J	41205
11	ANDERSON	RODNEY	S01L56936 B	R	ENDURANCE	64123
12	ASTOR	CRAIG	S01L59794 I	R	DREAMER	41317
13	BECK	MARK	S01L55925 M	NR	COLUMBIA	56222
14	BECKER	CARL	S01L57469 C	NR	VICTORIA	51091
15	BRANDAL	ALEC	S01L55170 U	R	ALEXANDRIA	32586
16	BRANDAL	HENRY	S01L50032 K	R	ALEUT KID	52522
17	BROWN	MALCOLM	S01L55938 M	R	DESIDERATA	41160
18	BUMPUS	DONALD	S01L61910 L	R	KIMBERLY DAWN	59651
19	CAMPBELL	DANIEL	S01L55731 X	NR	JULIE ANN	40262
20	CARLSON	AXEL	S01L57612 J	R	MISS MARIT	35863
21	CARLSON	CARL	S01L56192 Z	R	AARON C	21898
22	CARLSON	DALE	S01L57473 V	R	LADY DIANE	43370
23	CARLSON	ERIC	S01L62210 Z	R	ERICA RAE	33957
24	CARLSON	ERNEST	S01L57125 P	R	DESPERADO	43775
25	CARLSON	EUGENE	S01L55520 P	R	PATRIOT	56231
26	CARLSON	RODERICK	S01L57704 F	R	KANAK	43197
27	CARLSON	RUDY	S01L63976 A	R	MISS OLIVIA	41758
28	CARROLL	ALBERT	S01L60106 Z	NR	NORTHERN VIKING	36731
29	CONSTANTINE	JOHNNY	S01L57808 I	R	ORIOLE	15888
30	CRONK	GLEN	S01L58603 C	NR	ROYAL LADY	38635
31	ENDRESEN	ANDY	S01L60183 F	R	PROVIDER	17124
32	ERICKSON	CLARENCE	S01L56512 B	R	SHARON LEE	53266
33	GREGORIO	TONY	S01L58848 X	R	ANTOINETTE RENA	37548
34	GRUNERT	CLEMENS	S01L50332 L	R	ADVENTURESS	42335
35	GRUNERT	FRANK	S01L59851 X	R	KURT ELDON	61416
36	GRUNERT	MICHAEL	S01L55935 K	R	CAPT 'N SAM	59482
37	HARDEN	JERRI	S01L58578 P	NR	MARKAY	01873
38	HINDERER	RAECHEL	S01L57376 O	R	ILLUSION	10567
39	HINDERER	WALLACE	S01L57085 S	R	RAECHEL LOUISE	41592
40	JOHNSON	PAUL	S01L56395 S	NR	SUSAN RAE	35956
41	JONES	MORRIS	S01L56405 W	NR	ISLANDER	39275
42	KALMAKOFF	ARCHIE	S01L55361 H	R	DESERT STORM	38122
43	KALMAKOFF	GUSTIA	S01L50123 N	R	NICOLE DANIELLE	21554
44	KALMAKOFF	HARVEY	S01L50090 M	R	OCEAN SPRAY	23636
45	KALMAKOFF	JOSEPH	S01L60614 G	R	SEA-ROGUE	11017
46	KASHEVAROF	WILLIAM	S01L57487 N	R	CHRISTINE K	54242
47	KOPUN	ALOYS	S01L57863 I	R	KAREY GALE	45995
48	KOSBRUK	BORIS	S01L58206 U	R	LADY EVELYN	43200
49	KOSBRUK	HARRY	S01L56726 L	R	SAINT HERMAN	38528
50	KOSBRUK	IVAN	S01L50116 R	R	JELLY ROLL	45720
51	KULIN	STEPHEN	S01L60113 U	R	KRITARKA	63151
52	LIND	ELIA	S01L57384 C	R	ANITA MARIE	62031
53	LIND	ELLIOT	S01L56872 O	R	LISA MARIE	35950
54	LIND	JOHNNY	S01L50223 W	R	ALEUT SISTERS	38404
55	LOUNSBURY	BRETT	S01L58322 F	R	KARMA	31995
56	MCCALLUM	CHARLES	S01L55399 O	NR	GYPSY QUEEN	32397
57	MCKILLY	GABRIEL	S01L59493 O	R	DOROTHY-M	32863
58	ODOMIN	NICK	S01L57696 L	R	ELLA-MAE	00195

-Continued-

Table 1. (page 2 of 2)

	Name		Permit No.		Residency	Vessel Name	ADF&G No.
59	OGLE	LEONARD	S01L55311	R	R	CHALLENGE	61706
60	OLSEN	GARRETT	S01L58496	R	NR	ABSOLUT	21877
61	OLSEN	JEFFREY	S01L60115	F	NR	DENAKA	00111
62	OLSEN	KNUD	S01L56418	W	NR	HEIDI LINEA	55822
63	ORLOFF	GEORGE	S01L59308	M	R	MARJONETTE	57946
64	PEDERSEN	ALEC	S01L57695	S	R	DIANA	51282
65	PEDERSEN	ALVIN	S01L55953	V	R	MILLIE JO	37662
66	PEDERSEN	ARTHUR	S01L55954	N	R	SORCERESS	60216
67	PEDERSEN	AUGUST	S01L58126	H	R	SHARON ANN	59642
68	PEDERSEN	COREY	S01L64188	M	R	RESURRECTION	45469
69	PEDERSEN	HANS	S01L57171	K	R	SUSIE LYNN	40248
70	PEDERSEN	MARIUS	S01L64187	U	R	KAISHA LENAE	57465
71	PEDERSEN	STANLEY	S01L56589	I	R	SANDRA SUE	40911
72	PEDERSEN	TERRENCE	S01L50045	K	R	PRINCESS DANETT	00117
73	PLETNIKOFF	ROBERT	S01L58077	F	R	RITA MARIA	35986
74	SHANGIN	ANDY	S01L58145	K	R	SHARON DAWN	39351
75	SHANGIN	CLEMENT	S01L56733	H	R	MISS CLEMENTINE	38622
76	SHANGIN	DENNIS	S01L58178	G	R	MIRANDA LEIGH	21899
77	SHANGIN	EDGAR	S01L50123	N	R	NICOLE DANIELLE	21554
78	SHANGIN	RUSSELL	S01L57003	B	R	AMBER NICOLE	56291
79	SHANGIN	STEPHEN	S01L52949	G	R	JOSEPH BOONEY	58670
80	SIEMION	MATTHEW	S01L56992	S	NR	SEA BREEZE	32361
81	SIEMION	THEODORE	S01L56322	H	NR	OUTSIDER	20453
82	SIMPSON	DWIGHT	S01L58818	F	R	LADY ANN	58085
83	SKONBERG	BERNARD	S01L55477	R	R	CARMALEE	33858
84	SKONBERG	CALVIN	S01L56228	C	R	ROSALIE	34184
85	SKONBERG	DARRELL	S01L55546	P	R	ALASKA ROSE	33614
86	SKONBERG	GUY	S01L55361	H	R	MICHELLE LEE	35698
87	SKONBERG	RALPH	S01L50205	L	R	DAY DREAMER	28657
88	SKONBERG	ROY	S01L58470	R	R	AMY RAE	42210
89	STEPANOFF	ANDREW	S01L60144	G	R	LAURA JUNE	28396
90	STEPANOFF	SAM	S01L50338	P	R	SONIA FRANCINE	33778
91	STEPANOFF	WALTER	S01L57091	W	R	MIRACLE GIRL	36629
92	SUYDAM	GLENN	S01L59615	J	R	ALEUT SON	53205
93	SUYDAM	LOWELL	S01L56680	K	R	STELLOR	39962
94	TAKAK	AFONIE	S01L57035	F	R	MISS DEIDRE	21859
95	TEUBER	PAUL	S01L60121	I	NR	SONDRA	55545
96	VANWINGERDEN	MARK	S01L57296	B	R	KARISSE DAWN	58817
97	VEERHUSEN	DANIEL	S01L57662	X	R	SHADY LADY	59377
98	YAGIE	JERRY	S01L56797	N	R	NORTHWIND	36296
99	YAGIE	MARVIN	S01L57278	P	R	MAXINE	54909

Table 2. Residentiary status of permit holders in the Chignik Management Area, 1966-1994.

	Residentiary Status				
Year	Resident	Percent	Non-Resident	Percent	Total
1966	65	89	8	11	73
1967	73	88	10	12	83
1968	59	88.1	8	11.9	67
1969	57	83.8	11	16.2	68
1970	57	82.6	12	17.4	69
1971	64	83.1	13	16.9	77
1972	62	78.5	17	21.5	79
1973	63	81.8	14	18.2	77
1974	79	84	15	16	94
1975	72	83.7	14	16.3	86
1976	66	85.7	11	14.3	77
1977	74	84.1	14	15.9	88
1978	82	86.3	13	13.7	95
1979	87	86.1	14	13.9	101
1980	87	86.1	14	13.9	101
1981	87	84.5	16	15.5	103
1982	89	84.8	16	15.2	105
1983	84	84	16	16	100
1984	84	83.2	17	16.8	101
1985	85	84.2	16	15.8	101
1986	87	87	13	13	100
1987	89	87.3	13	12.7	102
1988	88	86.3	14	13.7	102
1989	86	84.3	16	15.7	102
1990	85	84.2	16	15.8	101
1991	85	83	18	17	103
1992	84	84	17	17	101
1993	85	83.3	17	16.7	102
1994	82	82.8	17	17.2	99

Table 3. Commercial salmon catches in the Chignik Management Area by district, statistical area, and species, 1994.

District	Stat. Area	Catch by Species in Number of Salmon					
		Chinook	Sockeye	Coho	Pink	Chum	Total
Chignik Bay	27110	1,808	908,042	70,541	59,425	25,250	1,065,066
	Total	1,808	908,042	70,541	59,425	25,250	1,065,066
Central	27220	37	3,220	2,203	5,341	2,130	12,931
	27230	513	180,591	14,610	13,826	23,886	233,426
	27240	2	524	240	1,707	646	3.119
	27250	320	210,830	1,792	36,032	35,050	284,024
	27262	431	178,319	949	42,243	7,840	229,782
	Total	1,303	573,484	19,794	99,149	69,552	763,282
Eastern	27260	30	11,239	26	1,360	370	13,325
	27270	0	554	142	6,711	1,600	9,007
	27292	13	8,248	8	4,881	2,363	15,513
	Total	43	20,041	176	12,952	4,333	37,545
Western	27372	0	966	60	338	85	1,449
	27374	255	18,693	36,923	115,325	61,033	232,229
	27380	10	4,598	1,691	5,335	1,349	12,983
	27390	134	34,041	62,923	47,216	26,824	171,138
	27394	53	6,027	8,879	6,427	4,825	26,211
	Total	452	64,325	110,476	174,641	94,116	444,010
Perryville	27540	270	44,390	34,568	77,456	31,795	188,479
	27550	43	8,691	1,649	7,440	2,230	20,053
	Total	313	53,081	36,217	84,896	34,025	208,532
Grand Total		3,919	1,618,973	237,204	431,063	227,276	2,518,435

Table 4. Commercial salmon catch by day and effort in the Chignik Management Area, 1994.

Date	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
12-Jun [a]	1	1	2	40	1,061	6,430	0	0	1	5	0	0	1,064	6475
14-Jun [a]	1	1	1	12	1,409	8,401	0	0	1	4	0	0	1,411	8417
16-Jun [a]	1	1	0	0	1,033	5,865	0	0	0	0	0	0	1,033	5865
18-Jun [a]	1	1	0	0	2,412	13,487	0	0	0	0	0	0	2,412	13487
20-Jun [a]	1	1	0	0	2,082	13,158	0	0	1	3	1	6	2,084	13167
21-Jun [b]	2	2	0	0	20,242	122,553	0	0	0	0	0	0	20,242	122,553
25-Jun	91	107	122	2,185	172,940	1,076,488	41	394	4,489	12,528	2,389	18,911	179,981	1,110,506
26-Jun	88	111	90	1,752	100,703	617,818	4	25	4,046	12,596	2,188	15,785	107,031	647,976
27-Jun	91	101	131	2,448	69,781	432,477	3	21	5,535	15,148	1,811	12,640	77,261	462,734
28-Jun	89	94	116	2,145	60,520	381,113	4	27	8,702	22,955	4,909	35,594	74,251	441,834
29-Jun	90	107	252	4,610	54,369	336,753	42	183	2,746	8,014	2,692	20,764	60,101	370,324
30-Jun	75	85	174	3,858	42,750	271,141	13	101	2,809	7,743	2,113	15,311	47,859	298,154
1-Jul	83	86	183	3,703	55,157	335,723	50	418	3,631	9,946	2,770	20,142	61,791	369,932
2-Jul	88	91	246	4,863	58,828	367,396	67	447	2,947	8,506	3,220	23,320	65,308	404,532
3-Jul	91	94	217	4,346	64,235	406,779	59	455	2,305	6,779	2,951	21,556	69,683	439,703
4-Jul	88	92	145	2,691	57,548	367,426	143	967	3,026	8,502	4,419	33,720	65,281	413,306
5-Jul	88	93	177	3,425	55,392	354,662	159	1,233	3,073	8,942	4,450	31,705	63,251	399,967
6-Jul	88	93	173	3,384	53,423	340,718	114	801	4,169	11,550	2,984	22,278	60,863	378,731
7-Jul	93	100	211	3,796	65,314	418,176	259	1,715	4,170	11,872	4,822	36,090	74,776	471,649
8-Jul	91	94	228	4,338	49,660	316,110	228	1,581	3,379	10,856	4,407	33,436	57,902	366,321
9-Jul	74	82	121	2,291	45,541	293,490	94	610	2,771	8,760	3,357	24,766	51,884	329,917
10-Jul	86	92	188	2,965	52,450	337,444	3,326	23,736	12,651	35,407	8,201	58,768	76,816	458,320
11-Jul	81	86	182	3,207	53,032	336,755	5,726	39,719	14,025	39,698	7,310	52,941	80,275	472,320
12-Jul	74	80	112	1,775	44,316	280,029	5,914	40,662	25,403	82,792	12,929	91,975	88,674	497,233
13-Jul	79	86	144	2,778	27,074	171,226	2,480	17,057	3,912	14,061	3,599	24,643	37,170	229,618
14-Jul	39	39	13	213	8,550	53,566	311	2,086	783	2,790	705	5,159	10,362	63,754
17-Jul [a]	1	1	1	3	1,002	6,464	0	0	11	43	11	79	1,025	6589
19-Jul	86	96	120	1,989	53,047	347,446	11,831	87,653	27,053	85,289	15,374	115,185	107,425	637,562
20-Jul	76	78	70	1,132	30,756	203,268	5,823	41,502	14,908	52,797	9,945	73,631	61,502	372,330
21-Jul	41	44	101	1,329	30,648	190,130	9,077	65,576	27,784	93,458	10,630	76,846	78,240	427,339
23-Jul	90	102	52	828	39,849	254,861	792	5,064	6,644	21,853	1,748	12,331	49,085	294,937
24-Jul	93	104	42	693	30,192	194,152	933	6,185	26,757	105,867	1,248	8,872	59,172	315,769
25-Jul	77	90	16	304	27,337	175,984	264	1,906	3,920	15,460	681	4,793	32,218	8,447
26-Jul	9	9	1	15	2,245	14,637	0	0	311	1,187	40	240	2,597	16,079
28-Jul	90	95	79	1,240	30,314	189,767	15,737	108,626	54,734	173,592	14,249	99,957	115,113	573,182
29-Jul	91	99	58	810	19,874	124,116	10,736	79,902	33,416	125,885	16,178	116,835	80,210	447,196

-Continued-

Table 4. (page 2 of 2) (1992)

Date	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
30-Jul	7	7	4	99	985	5,886	8	63	568	2,667	115	845	1,680	9,560
3-Aug	87	96	45	732	16,719	100,725	13,720	101,199	48,269	182,136	20,324	148,883	99,077	533,675
4-Aug	84	86	39	694	11,654	70,343	12,696	97,126	33,588	128,431	18,767	133,124	76,744	429,718
5-Aug	51	52	4	81	10,029	59,383	79	630	8,939	40,510	1,579	11,703	20,630	112,307
6-Aug	51	52	0	0	6,856	40,384	36	305	3,569	16,575	1,990	14,490	12,451	71,754
9-Aug	33	33	2	25	2,551	14,573	21	155	1,452	6,464	534	3,768	4,560	24,985
10-Aug	55	60	3	80	7,008	40,700	391	3,205	4,970	22,425	5,136	36,521	17,508	102,931
11-Aug	47	49	4	73	6,494	36,517	258	2,099	3,529	15,110	2,233	15,372	12,518	69,171
12-Aug	48	50	0	0	4,421	25,466	103	785	2,103	9,494	1,178	7,991	7,805	43,736
16-Aug	54	54	1	40	5,339	30,507	1,719	13,896	2,847	12,280	1,637	11,130	11,543	67,853
17-Aug	37	39	0	0	3,687	21,553	951	7,748	1,121	4,747	2,116	14,147	7,875	48,195
18-Aug	33	34	4	123	3,851	21,933	851	7,294	790	3,232	1,296	8,927	6,823	41754
23-Aug	53	53	7	126	5,339	32,496	11,278	99,307	2,491	10,106	4,141	28,704	23,256	170,739
24-Aug	61	65	3	36	8,492	49,281	12,155	110,924	2,371	9,471	3,990	25,847	27,011	195,559
25-Aug	52	53	2	29	6,185	36,281	10,469	97,308	1,385	5,284	2,478	16,000	20,519	154,902
26-Aug	9	9	3	62	1,305	7,291	3,392	25,579	573	2,180	644	4,303	5,917	39,415
30-Aug	54	58	5	65	5,402	31,804	20,552	190,730	527	1,856	1,844	11,643	28,330	236,098
31-Aug	52	57	2	41	6,478	37,072	14,069	133,466	821	3,346	1,520	9,087	22,890	183,012
1-Sep	49	52	10	189	5,345	29,907	15,907	146,182	462	1,544	1,113	6,872	22,837	184,694
2-Sep	46	49	4	62	4,749	26,587	12,488	119,336	376	1,319	1,208	6,952	18,825	154,256
3-Sep	4	4	0	0	94	517	49	460	2	7	84	380	229	1,364
6-Sep	39	42	7	113	2,971	17,083	10,965	106,448	115	387	522	3,130	14,580	127,161
7-Sep	41	43	2	27	3,152	17,256	10,923	106,898	58	197	391	1,957	14,466	126,335
8-Sep	34	34	0	0	2,188	12,321	5,463	52,732	22	57	155	900	7,828	66,010
13-Sep	9	10	0	0	754	3,968	2,355	23,573	1	4	6	37	3,116	27,582
14-Sep	9	9	0	0	469	2,561	924	9,046	1	2	3	13	1,397	11,622
15-Sep	9	9	0	0	485	2,622	673	7,064	0	0	1	6	1,159	9,692
19-Sep	9	9	0	0	827	4,530	463	4,470	0	0	0	0	1,290	9,000
21-Sep [c]			0	0	58	279	16	146	0	0	0	0	74	425
Total	99	3,707	3,919	71,865	1,618,973	10,145,835	237,204	1,996,826	431,063	1,494,659	227,276	1,631,011	2,518,435	15,340,196
Average Weight				18.34		6.27		8.42		3.47		7.18		

[a] Test Fishery within Chignik Lagoon.

[b] Chignik Seiners cooperative sets for strike fund.

[c] Effort information omitted when vessels < 3.

Table 5. Commercial salmon catch and effort by statistical area and day in the Chignik Management Area, 1994.

STAT AREA	DATE	Fishing Effort[a]		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27110	12-Jun [b]	1	1	2	40	1,061	6,430	0	0	1	5	0	0	1,064	6,475
	13-Jun [b]	1	1	1	12	1,409	8,401	0	0	1	4	0	0	1,411	8,417
	16-Jun [b]	1	1	0	0	1,033	5,865	0	0	0	0	0	0	1,033	5,865
	18-Jun [b]	1	1	0	0	2,412	13,487	0	0	0	0	0	0	2,412	13,487
	20-Jun [c]	1	1	0	0	2,082	13,158	0	0	1	3	1	6	2,084	13,167
	21-Jun	2	2	0	0	20,242	122,553	0	0	0	0	0	0	20,242	122,553
	25-Jun	59	75	74	1,481	119,210	749,459	0	0	30	89	7	59	119,321	751,088
	26-Jun	55	76	57	1,203	67,727	419,669	0	0	195	563	49	346	68,028	421,781
	27-Jun	49	59	78	1,513	33,693	208,773	0	0	10	33	7	47	33,788	210,366
	28-Jun	47	51	62	1,023	19,578	121,493	0	0	8	24	8	65	19,656	122,605
	29-Jun	44	51	64	1,255	21,539	135,927	0	0	5	15	4	23	21,612	137,220
	30-Jun	41	47	114	2,611	16,788	108,275	0	0	129	382	10	70	17,041	111,338
	1-Jul	41	43	101	2,050	16,258	102,457	0	0	12	39	12	86	16,383	104,632
	2-Jul	43	45	166	3,328	22,723	143,119	0	0	22	64	9	63	22,920	146,574
	3-Jul	39	41	113	2,620	22,571	145,025	0	0	16	49	3	21	22,703	147,715
	4-Jul	40	44	46	918	16,045	101,628	11	68	181	567	94	614	16,377	103,795
	5-Jul	39	44	99	1,969	18,229	115,539	18	160	106	357	53	316	18,505	118,341
	6-Jul	41	46	107	2,317	20,924	134,354	2	11	63	209	17	112	21,113	137,003
	7-Jul	46	52	114	2,202	30,970	198,311	2	14	139	429	8	62	31,233	201,018
	8-Jul	44	47	143	3,008	26,131	166,982	3	19	94	313	14	108	26,385	170,430
	9-Jul	44	49	78	1,529	24,291	156,575	2	13	136	436	55	492	24,562	159,045
	10-Jul	41	46	56	1,013	22,982	149,290	1	5	68	235	43	303	23,150	150,846
	11-Jul	36	41	51	1,044	24,045	152,864	1	10	139	459	23	158	24,259	154,535
	12-Jul	36	41	30	479	16,426	104,181	30	213	359	1,423	200	1,516	17,045	107,812
	13-Jul	45	52	73	1,516	18,934	119,583	24	167	276	1,058	90	648	19,397	122,972
	14-Jul	32	32	10	168	7,083	44,611	3	16	59	208	26	189	7,181	45,192
	17-Jul [a]	1	1	1	3	1,002	6,464	0	0	11	43	11	79	1,025	6,589
	19-Jul	41	49	38	769	41,088	270,783	2	15	602	2,508	103	705	41,833	274,780
	20-Jul	41	41	32	669	21,760	145,135	4	29	315	1,247	208	1,616	22,319	148,696
	21-Jul	2	2	0	0	20,242	122,553	0	0	0	0	0	0	20,242	122,553
	23-Jul	62	74	19	386	33,789	215,107	7	35	1,298	5,690	177	1,281	35,290	222,499
	24-Jul	60	70	17	362	27,405	177,063	25	192	1,481	6,422	130	941	29,058	184,980
	25-Jul	61	73	11	220	26,236	169,482	64	462	2,140	8,968	306	2,153	28,757	181,285

-Continued-

Table 5. (page 2 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	26-Jul	8	8	1	15	2,187	14,314	0	0	247	913	28	160	2,463	15,402
	28-Jul	59	64	16	301	23,673	148,122	12	91	4,746	20,739	212	1,525	28,659	170,778
	29-Jul	60	67	4	110	15,776	97,701	37	288	4,462	20,159	340	2,361	20,619	120,619
	30-Jul	6	6	1	19	790	4,732	1	5	263	1,256	12	74	1,067	6,086
	3-Aug	44	51	3	40	10,623	62,412	45	356	7,746	35,423	1,284	8,997	19,701	107,228
	4-Aug	38	40	3	53	5,904	34,533	7	50	3,210	14,561	782	5,378	9,906	54,575
	5-Aug	49	50	4	81	9,957	59,059	42	317	8,756	39,692	1,359	10,177	20,118	109,326
	6-Aug	51	52	0	0	6,856	40,384	36	305	3,569	16,575	1,990	14,490	12,451	71,754
	9-Aug	33	33	2	25	2,551	14,573	21	155	1,452	6,464	534	3,768	4,560	24,985
	10-Aug	55	60	3	80	7,008	40,700	391	3,205	4,970	22,425	5,136	36,521	17,508	102,931
	11-Aug	47	49	4	73	6,494	36,517	258	2,099	3,529	15,110	2,233	15,372	12,518	69,171
	12-Aug	48	50	0	0	4,421	25,466	103	785	2,103	9,494	1,178	7,991	7,805	43,736
	16-Aug	54	54	1	40	5,339	30,507	1,719	13,896	2,847	12,280	1,637	11,130	11,543	67,853
	17-Aug	37	39	0	0	3,687	21,553	951	7,748	1,121	4,747	2,116	14,147	7,875	48,195
	18-Aug	33	34	4	123	3,851	21,933	851	7,294	790	3,232	1,296	8,927	6,792	41,509
	23-Aug	29	29	2	49	3,595	21,402	2,741	24,205	317	1,283	298	1,973	6,953	48,912
	24-Aug	44	47	1	15	6,082	34,959	4,829	44,302	742	2,940	1,506	9,383	13,160	91,599
	25-Aug	38	39	0	0	4,550	26,584	5,445	50,453	433	1,616	676	4,021	11,104	82,674
	26-Aug	5	5	2	41	216	1,194	360	3,247	115	464	140	891	833	5,837
	30-Aug	35	37	0	0	3,285	19,494	12,788	121,962	4	15	212	1,317	16,289	142,788
	31-Aug	34	38	0	0	3,202	18,582	8,827	84,643	58	216	236	1,388	12,323	104,829
	1-Sep	34	36	0	0	2,890	16,122	7,193	70,023	19	81	170	962	10,272	87,188
	2-Sep	27	27	0	0	1,553	8,841	3,958	37,688	8	30	27	154	5,546	46,713
	3-Sep	3	3	0	0	93	513	46	436	0	0	0	0	139	949
	6-Sep	27	29	0	0	1,696	9,706	6,789	66,842	8	27	130	727	8,623	77,302
	7-Sep	26	28	0	0	1,730	9,596	4,766	47,015	9	26	29	157	6,534	56,794
	8-Sep	21	21	0	0	1,532	8,601	3,695	36,313	2	6	11	63	5,240	44,983
	13-Sep	9	10	0	0	754	3,968	2,355	23,573	1	4	6	37	3,116	27,582
	14-Sep	9	9	0	0	469	2,561	924	9,046	1	2	3	13	1,397	11,622
	15-Sep	9	9	0	0	485	2,622	673	7,064	0	0	1	6	1,159	9,692
	19-Sep	9	9	0	0	827	4,530	463	4,470	0	0	0	0	1,290	9,000
	21-Sep			0	0	58	279	16	146	0	0	0	0	74	425
	Totals	88	2,334	1,808	36,773	908,042	5,696,656	70,541	669,451	59,425	261,622	25,250	174,189	1,065,066	6,838,691
	Average Weight				20.34		6.27		9.49		4.4		6.9		

-Continued-

Table 5. (page 3 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27220	3-Jul			0	0	288	1,836	0	0	0	0	0	0	288	1,836
	11-Jul			2	22	250	1,274	33	210	104	394	111	831	500	2,731
	13-Jul			0	0	218	1,429	0	0	0	0	0	0	218	1,429
	14-Jul			3	45	722	4,597	287	1,936	542	1,901	537	3,889	2,091	12,368
	23-Jul	3	3	16	197	843	5,453	318	1,997	1,628	4,099	473	3,487	3,278	15,233
	24-Jul	7	7	14	161	313	1,853	625	4,062	1,309	4,440	465	3,287	2,726	13,803
	25-Jul			0	0	75	344	57	422	301	1,091	74	493	507	2,350
	4-Aug			1	28	249	1,433	70	520	1,168	2,745	49	392	1,537	5,118
	5-Aug			0	0	72	324	37	313	183	818	220	1,526	512	2,981
	23-Aug			0	0	27	139	176	1,665	73	300	106	664	382	2,768
	26-Aug			0	0	23	130	136	1,154	33	100	95	624	287	2,008
	7-Sep			1	13	140	855	464	4,373	0	0	0	0	605	5,241
	Totals	17	24	37	466	3,220	19,667	2,203	16,652	5,341	15,888	2,130	15,193	12,931	67,866
	Average Weight				12.59		6.11		7.56		2.97		7.13		
27230	25-Jun	10	10	4	74	9,984	69,701	0	0	45	138	457	3,361	10,490	73,274
	26-Jun	8	8	12	168	6,071	38,727	3	16	95	302	196	1,359	6,377	40,572
	27-Jun	5	5	5	98	5,046	30,486	0	0	115	341	275	1,936	5,441	32,861
	28-Jun	4	4	6	145	3,316	21,807	0	0	10	33	170	1,283	3,502	23,268
	29-Jun	12	17	71	1,219	11,618	71,178	2	22	313	1,091	871	6,946	12,875	80,456
	30-Jun	14	16	24	365	7,608	47,226	5	44	114	406	422	3,136	8,173	51,177
	1-Jul	12	13	20	395	9,611	57,450	15	148	368	1,002	817	6,360	10,831	65,355
	2-Jul	13	13	23	414	9,919	61,988	26	188	165	497	867	6,132	11,000	69,219
	3-Jul	17	18	34	534	12,404	79,096	2	11	338	1,148	895	6,523	13,673	87,312
	4-Jul	13	13	48	832	13,345	85,001	16	123	636	1,848	1,526	11,582	15,571	99,386
	5-Jul	15	15	32	531	13,442	88,708	9	77	781	2,191	1,652	11,504	15,916	103,011
	6-Jul	20	20	48	782	14,157	90,874	10	66	874	2,753	1,607	12,141	16,696	106,616
	7-Jul	15	16	40	609	11,369	73,861	87	606	901	2,898	1,864	14,281	14,261	92,255
	8-Jul	20	20	47	623	8,462	54,338	25	173	787	2,495	2,064	16,169	11,385	73,798
	9-Jul	20	21	28	483	10,650	70,408	16	98	1,023	3,427	1,657	12,190	13,374	86,606
	10-Jul	13	13	14	123	8,012	52,330	49	368	595	2,217	1,193	8,702	9,863	63,740
	11-Jul	12	12	8	153	3,594	23,559	44	324	488	1,472	512	4,005	4,646	29,513

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Table 5. (page 4 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	12-Jul	7	7	2	64	3,407	21,768	26	206	302	1,360	300	2,516	4,037	25,914
	13-Jul	9	9	10	156	1,217	7,707	22	162	171	613	193	1,493	1,613	10,131
	14-Jul	3	3	0	0	178	1,076	10	66	68	254	76	571	332	1,967
	19-Jul	9	9	6	106	2,573	16,252	37	236	763	2,629	284	2,034	3,663	21,257
	20-Jul	5	5	0	0	1,158	7,521	92	689	457	1,979	245	1,874	1,952	12,063
	23-Jul	13	13	12	168	2,278	15,663	62	423	834	3,422	240	1,638	3,426	21,314
	24-Jul	11	12	3	44	978	5,933	21	155	481	1,699	115	792	1,598	8,623
	25-Jul	8	8	3	41	599	3,565	22	168	699	2,475	136	969	1,459	7,218
	26-Jul			0	0	58	323	0	0	64	274	12	80	134	677
	28-Jul			2	16	426	2,629	21	171	405	1,829	142	1,035	996	5,680
	29-Jul			0	0	103	652	7	52	193	841	75	533	378	2,078
	30-Jul			3	80	195	1,154	7	58	305	1,411	103	771	613	3,474
	3-Aug			1	11	82	470	7	63	127	565	60	433	277	1,542
	4-Aug			0	0	75	469	4	34	184	839	124	889	387	2,231
	23-Aug			0	0	284	1,784	479	4,691	168	661	641	4,547	1,572	11,683
	24-Aug	5	5	1	12	953	5,404	1,561	14,595	462	1,828	1,004	6,285	3,981	28,124
	25-Aug	6	6	0	0	780	4,397	987	9,720	213	927	685	4,245	2,665	19,289
	30-Aug	7	7	4	50	847	5,105	1,327	12,439	60	286	445	2,681	2,683	20,561
	31-Aug	6	7	0	0	1,357	7,478	1,875	17,848	106	394	621	3,472	3,959	29,192
	1-Sep	5	6	2	37	1,154	6,028	1,983	18,425	36	135	320	1,803	3,495	26,428
	2-Sep	9	11	0	0	1,769	9,593	2,815	27,291	67	252	672	3,654	5,323	40,790
	3-Sep			0	0	1	4	3	24	2	7	84	380	90	415
	6-Sep	5	5	0	0	480	2,625	973	9,018	11	40	119	682	1,583	12,365
	7-Sep	7	7	0	0	642	3,313	1,412	13,690	0	0	76	416	2,130	17,419
	8-Sep	6	6	0	0	389	2,092	548	5,152	0	0	69	383	1,006	7,627
	Totals	47	369	513	8,333	180,591	1,149,743	14,610	137,640	13,826	48,979	23,886	171,786	233,426	1,516,481
	Average Weight				16.24		6.36		9.42		3.54		7.19		
27240	23-Jul			1	15	87	537	29	230	220	907	81	609	418	2,298
	24-Jul			0	0	107	584	44	306	334	1,391	100	495	585	2,776
	25-Jul			1	11	48	282	48	391	294	1,335	83	623	474	2,642
	4-Aug			0	0	282	1,605	119	947	859	3,713	382	2,655	1,642	8,920
	Totals	3	5	2	26	524	3,008	240	1,874	1,707	7,346	646	4,382	3,119	16,636
	Average Weight				13		5.74		7.8		4.3		6.78		

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Table 5. (page 5 of 10)

STAT		Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
AREA	DATE	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27250	25-Jun	15	15	24	324	23,558	133,330	41	394	2,878	8,430	1,791	14,555	28,292	157,033
	26-Jun	14	14	3	90	15,701	92,960	1	9	1,863	5,803	1,471	10,296	19,039	109,158
	27-Jun	18	18	11	236	13,546	82,666	2	13	1,629	4,645	667	4,756	15,855	92,316
	28-Jun	14	15	23	458	16,577	108,413	1	8	3,420	8,531	2,663	19,855	22,684	137,265
	29-Jun	16	16	33	676	10,734	65,495	5	41	1,374	3,831	1,537	11,746	13,683	81,789
	30-Jun	14	15	18	551	13,047	82,786	6	40	2,107	5,629	1,584	11,400	16,762	100,406
	1-Jul	13	13	20	387	10,212	63,076	28	212	2,076	5,590	1,450	10,364	13,786	79,629
	2-Jul	14	14	25	512	13,186	82,168	16	112	1,272	3,583	1,872	13,818	16,371	100,193
	3-Jul	14	14	21	339	12,098	77,806	29	259	902	2,663	1,546	11,442	14,596	92,509
	4-Jul	14	14	21	325	15,129	97,278	60	397	1,256	3,578	2,165	17,115	18,631	118,693
	5-Jul	13	13	16	228	9,033	58,027	73	612	758	2,234	1,558	11,587	11,438	72,688
	6-Jul	10	10	11	145	6,837	41,576	26	181	1,213	3,753	715	5,265	8,802	50,920
	7-Jul	13	13	26	428	13,370	84,789	69	422	1,686	4,512	2,134	15,915	17,285	106,066
	8-Jul	12	12	18	332	8,276	51,960	101	678	1,292	4,049	1,725	12,889	11,412	69,908
	9-Jul	8	9	8	131	7,576	47,287	70	463	1,108	3,568	1,478	11,058	10,240	62,507
	10-Jul	7	7	7	109	5,579	35,007	116	808	828	2,114	1,272	9,968	7,802	48,006
	11-Jul	8	8	6	120	5,397	34,155	156	1,173	998	3,498	1,112	8,380	7,669	47,326
	12-Jul	6	6	10	188	3,692	23,252	106	644	708	2,106	445	3,110	4,961	29,300
	13-Jul	6	6	11	210	2,739	17,082	277	1,700	669	2,014	654	4,572	4,350	25,578
	14-Jul			0	0	567	3,282	11	68	114	367	66	510	758	4,227
	19-Jul			0	0	195	1,214	20	138	3,933	11,819	6,265	46,395	10,413	59,566
	23-Jul	9	9	2	41	2,454	15,553	343	2,138	2,115	6,018	583	3,915	5,497	27,665
	24-Jul	8	8	5	97	948	6,000	162	1,090	1,347	4,610	215	1,490	2,677	13,287
	25-Jul	5	5	1	32	379	2,311	73	463	486	1,591	82	555	1,021	4,952
	Totals	26	258	320	5,959	210,830	1,307,473	1,792	12,063	36,032	104,536	35,050	260,956	284,024	1,690,987
	Average Weight				18.62		6.2		6.73		2.9		7.44		
27262	25-Jun	6	6	15	226	17,024	105,823	0	0	1,477	3,692	118	824	18,634	110,565
	26-Jun	10	11	15	220	10,449	61,942	0	0	1,513	4,724	258	1,987	12,235	68,873
	27-Jun	16	16	31	464	15,677	99,897	0	0	2,865	7,722	508	3,524	19,081	111,607
	28-Jun	9	9	4	96	8,288	51,052	0	0	989	2,759	174	1,229	9,455	55,136
	29-Jun	17	22	83	1,440	10,071	61,692	35	120	817	2,431	199	1,408	11,205	67,091

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Table 5. (page 6 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	30-Jun	7	7	18	331	5,307	32,854	2	17	459	1,326	97	705	5,883	35,233
	1-Jul	17	17	42	871	19,076	112,740	7	58	1,175	3,315	491	3,332	20,791	120,316
	2-Jul	19	19	32	609	13,000	80,121	25	147	1,488	4,362	472	3,307	15,017	88,546
	3-Jul	20	20	49	853	16,874	103,016	28	185	1,049	2,919	507	3,570	18,507	110,543
	4-Jul	21	21	30	616	13,029	83,519	56	379	953	2,509	634	4,409	14,702	91,432
	5-Jul	21	21	30	697	14,688	92,388	59	384	1,428	4,160	1,187	8,298	17,392	105,927
	6-Jul	17	17	7	140	11,505	73,914	76	543	2,019	4,835	645	4,760	14,252	84,192
	7-Jul	19	19	31	557	9,605	61,215	101	673	1,444	4,033	816	5,832	11,997	72,310
	8-Jul	15	15	20	375	6,791	42,830	99	711	1,206	3,999	604	4,270	8,720	52,185
	9-Jul			7	148	3,024	19,220	6	36	504	1,329	167	1,026	3,708	21,759
	10-Jul	4	4	5	82	1,419	8,886	35	228	216	895	148	995	1,823	11,086
	11-Jul			2	15	390	2,389	9	60	43	160	30	225	474	2,849
	12-Jul			2	48	955	5,840	6	40	115	452	33	203	1,111	6,583
	13-Jul			3	40	173	1,135	10	64	44	178	16	118	246	1,535
	23-Jul			2	21	398	2,548	33	241	549	1,717	194	1,401	1,176	5,928
	24-Jul	6	6	3	29	441	2,719	56	380	21805	87305	223	1867	22528	92300
	24-Aug			0	0	135	817	306	2,799	85	359	319	1,994	845	5,969
	Totals			431	7,878	178,319	1,106,557	949	7,065	42,243	145,181	7,840	55,284	229,782	1,321,965
	Average Weight				18.27		6.2		7.44		3.43		7.05		
27260	25-Jun			5	80	3,164	18,175	0	0	59	179	16	112	3,244	18,546
	28-Jun	9	9	18	359	7,733	47,363	3	19	1,164	3,085	277	1,952	9,195	52,778
	10-Jul			7	96	342	1,961	23	144	137	501	77	525	586	3,227
	Totals	12	12	30	535	11,239	67,499	26	163	1,360	3,765	370	2,589	13,025	74,551
	Average Weight				17.83		6		6.26		2.76		6.99		
27270	12-Jul			0	0	536	3,086	0	0	6,711	28,799	1,600	10,787	8,847	42,672
	6-Sep			0	0	18	90	142	1,450	0	0	0	0	160	1,540
	Totals			0	0	554	3,176	142	1,450	6,711	28,799	1,600	10,787	9,007	44,212
	Average Weight						5.73		10.21		4.29		6.74		

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Table 5. (page 7 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27292	26-Jun			3	71	755	4,520	0	0	380	1,204	214	1,797	1,352	7,592
	27-Jun	3	3	6	137	1,819	10,655	1	8	916	2,407	354	2,377	3,096	15,584
	28-Jun	6	6	3	64	5,028	30,985	0	0	3,111	8,523	1,617	11,210	9,759	50,782
	29-Jun			1	20	407	2,461	0	0	237	646	81	641	726	3,768
	10-Jul			0	0	239	1,501	7	59	237	711	97	779	580	3,050
	Totals	7	13	13	292	8,248	50,122	8	67	4,881	13,491	2,363	16,804	15,513	80,776
	Average Weight				22.46		6.07		8.37		2.76		7.11		
27372	12-Jul			0	0	966	6,765	60	423	338	676	85	592	1,449	8,456
	Totals			0	0	966	6,765	60	423	338	676	85	592	1,449	8,456
	Average Weight				0		7		7.05		2		6.96		
27374	10-Jul	8	8	49	737	3,390	22,126	454	3,398	2,060	6,655	2,227	15,660	8,180	48,576
	11-Jul	7	7	12	172	3,232	20,480	996	5,895	3,905	10,311	2,581	16,711	10,666	53,569
	12-Jul	7	8	23	276	4,297	26,138	2,508	16,794	10,868	27,698	7,677	54,525	25,373	125,431
	13-Jul	4	4	1	12	307	1,659	153	1,081	626	2,252	873	6,346	1,960	11,350
	19-Jul	10	10	29	414	1,105	6,827	2,860	23,377	5,777	21,568	3,855	28,688	13,626	80,874
	20-Jul	6	6	20	260	428	2,741	2,916	21,823	4,348	16,429	3,242	24,231	10,954	65,484
	21-Jul	6	6	65	863	992	7,006	4,992	38,415	10,276	31,060	5,528	39,409	21,853	116,753
	28-Jul	11	11	15	221	1,337	8,480	6,736	46,010	34,018	92,853	9,182	65,131	51,288	212,695
	29-Jul	9	9	20	334	854	5,384	4314	29969	13994	48956	9258	65646	28440	150,289
	3-Aug	16	17	15	252	1,562	9,747	5,192	37,880	17,854	57,027	7,965	60,135	32,588	165,041
	4-Aug	14	14	6	159	1,189	7,441	5,862	42,046	11,599	40,561	8,645	57,652	27,301	147,859
	Totals	33	100	255	3,700	18,693	118,029	36,923	266,688	115,325	355,370	61,033	434,134	232,229	1,177,921
	Average Weight				14.5		6.31		7.22		3.08		7.11		
27380	11-Jul			1	20	2,007	13,046	87	538	157	472	155	1,088	2,407	15,164
	12-Jul			1	9	1,042	6,400	161	930	203	651	182	1,359	1,589	9,349
	13-Jul			3	55	516	3,403	66	512	67	478	53	460	705	4,908

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Table 5. (page 8 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	3-Aug			4	86	494	3,042	470	2,938	2,040	6,122	309	2,090	3,317	14,278
	4-Aug	3	3	1	16	539	3,162	907	6,732	2,868	10,898	650	4,705	4,965	25,513
	Totals	6	9	10	186	4,598	29,053	1,691	11,650	5,335	18,621	1,349	9,702	12,983	69,212
	Average Weight				18.6		6.31		6.88		3.49		7.19		
27390	10-Jul	5	5	6	142	5,222	33,188	609	3,983	2,357	6,873	1,387	9,014	9,581	53,200
	11-Jul	5	5	16	333	5,771	36,325	299	2,212	1,120	2,860	746	5,328	7,952	47,058
	12-Jul	3	3	8	69	2,878	18,004	180	1,272	323	984	204	1,604	3,593	21,933
	19-Jul	4	4	3	52	1,016	6,864	813	5,865	1,247	5,028	553	4,036	3,632	21,845
	20-Jul	3	3	4	30	588	3,585	538	3,815	1,169	4,422	455	3,176	2,754	15,028
	21-Jul	6	6	6	80	846	5,287	366	2,723	1,395	5,719	443	3,329	3,056	17,138
	28-Jul	10	10	29	402	2,501	15,786	4,322	30,603	8,153	33,727	2,185	15,294	17,190	95,812
	29-Jul	10	10	9	145	1,453	9,348	3,645	28,838	8,265	32,872	3,528	24,970	16,900	96,173
	3-Aug	17	17	8	116	1,968	11,830	5,077	36,640	11,263	45,366	6,073	42,057	24,389	136,009
	4-Aug	15	15	20	285	1,009	5,698	3,165	25,361	5,977	24,142	3,313	23,585	13,484	79,071
	23-Aug	19	19	5	77	1,363	8,796	7,311	63,435	1,866	7,581	2,760	19,404	13,305	99,293
	24-Aug	10	10	1	9	1,294	7,947	4,930	44,207	1,082	4,344	1,086	7,716	8,393	64,223
	25-Aug	7	7	1	17	842	5,228	3,960	36,473	739	2,741	1,019	7,208	6,561	51,667
	26-Aug	3	3	1	21	1,066	5,967	2,896	21,178	425	1,616	409	2,788	4,797	31,570
	30-Aug	10	10	1	15	972	5,608	4,934	41,916	416	1,373	878	5,806	7,201	54,718
	31-Aug	8	8	1	20	1,726	9,946	2,460	22,443	619	2,592	578	3,723	5,384	38,724
	1-Sep	6	6	4	67	947	5,870	5,610	46,887	383	1,236	492	3,337	7,436	57,397
	2-Sep	5	5	4	62	1,066	6,298	3,727	35,445	256	876	214	1,453	5,267	44,134
	6-Sep	5	6	6	97	674	4,193	2,808	26,674	92	309	205	1,341	3,785	32,614
	7-Sep	6	6	1	14	622	3,412	4,281	41,820	49	171	226	1,384	5,179	46,801
	8-Sep	5	5	0	0	217	1,376	992	9,336	20	51	70	427	1,299	11,190
	Totals	49	163	134	2,053	34,041	210,556	62,923	531,126	47,216	184,883	26,824	186,980	171,138	1,115,598
	Average Weight				15.32		6.18		8.44		3.91		6.97		
27394	3-Aug			13	220	205	1,274	173	1,078	900	2,840	720	4,678	2,011	10,090
	4-Aug			0	0	172	921	262	2,155	649	2,834	386	2,712	1,469	8,622

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Table 5. (page 9 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	23-Aug			0	0	70	375	571	5,311	67	281	336	2,116	1,044	8,083
	24-Aug			0	0	28	154	529	5,021	0	0	75	469	632	5,644
	25-Aug			1	12	13	72	77	662	0	0	98	526	189	1,272
	30-Aug	3	4	0	0	298	1,597	1,503	14,413	47	182	309	1,839	2,157	18,031
	31-Aug	4	4	1	21	193	1,066	907	8,532	38	144	85	504	1,224	10,267
	1-Sep	4	4	4	85	354	1,887	1,121	10,847	24	92	131	770	1,634	13,681
	2-Sep	6	6	0	0	361	1,855	1,988	18,912	45	161	295	1,691	2,689	22,619
	6-Sep			1	16	103	469	253	2,464	4	11	68	380	429	3,340
	7-Sep			0	0	18	80	0	0	0	0	0	0	18	80
	8-Sep			0	0	50	252	228	1,931	0	0	5	27	283	2,210
	Totals	25	50	53	720	6,027	36,632	8,879	80,446	6,427	26,641	4,825	34,130	26,211	178,569
	Average Weight				13.58		6.07		9.06		4.14		7.07		
27540	10-Jul	5	6	44	663	5,265	33,155	2,032	14,743	6,153	15,206	1,757	12,822	15,251	76,589
	11-Jul	8	8	80	1,278	7,761	48,893	4,026	28,224	6,616	18,472	1,600	12,256	20,083	109,123
	12-Jul	7	7	30	570	8,132	51,879	2,665	19,012	5,039	17,149	1,949	13,898	17,815	102,508
	13-Jul	7	7	27	547	2,354	15,408	1,762	12,196	1,791	6,522	1,303	7,556	7,237	42,229
	19-Jul	15	16	44	648	5,278	34,439	7,721	55,691	13,252	37,186	4,079	31,713	30,374	159,677
	20-Jul	12	11	5	74	2,959	19,215	1,744	11,482	5,969	19,474	4,780	35,677	15,457	85,922
	21-Jul	12	12	13	190	4,949	31,557	2,344	14,942	10,065	31,326	2,686	19,622	20,057	97,637
	28-Jul	8	8	10	183	2,334	14,452	4,586	31,551	7,296	23,905	2,423	16,187	16,649	86,278
	29-Jul	8	9	8	114	1,338	8,801	2,632	19,919	5,862	20,323	2,869	22,567	12,709	71,724
	3-Aug	6	6	1	7	1,785	11,950	2,756	22,244	8,339	34,793	3,913	30,493	16,794	99,487
	4-Aug	8	8	8	153	2,235	15,081	2,300	19,281	7,074	28,138	4,436	35,156	16,053	97,809
	Totals	29	98	270	4,427	44,390	284,830	34,568	249,285	77,456	252,494	31,795	237,947	188,479	1,028,983
	Average Weight				16.39		6.41		7.21		3.25		7.48		
27550	11-Jul			2	20	33	198	51	313	22	82	69	435	177	1,048
	12-Jul	3	3	6	72	1,985	12,716	172	1,128	437	1,494	254	1,865	2,854	17,275
	13-Jul			2	74	140	977	14	100	39	139	36	255	231	1,545
	19-Jul	5	5	0	0	1,382	8,016	376	2,310	1,359	4,311	233	1,591	3,350	16,228

-Continued-

Table 5. (page 10 of 10)

STAT AREA	DATE	Fishing Effort		Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
		Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	20-Jul	9	9	3	40	3,577	23,234	422	2,865	2,396	8,160	914	6,236	7,312	40,535
	21-Jul	7	7	6	87	1,502	10,453	457	3,062	2,761	10,346	517	3,682	5,243	27,630
	28-Jul			7	117	43	298	60	200	116	539	105	785	331	1,939
	29-Jul			17	107	29	177	97	805	310	1,296	102	707	555	3,092
	Totals	15	29	43	517	8,691	56,069	1,649	10,783	7,440	26,367	2,230	15,556	20,053	109,292
	Average Weight				12.02		6.45		6.53		3.54		6.97		

[a]Effort data was omitted due to confidentiality concerns when vessels<3.

[b]Catch from this delivery is from a test fishery.

[c] Chignik Seiners' cooperative sets for strike fund.

Table 6. Comparison of average weights of salmon, based on fish ticket weights, caught inside and outside the Chignik Bay District, 1983-94.

Salmon Caught within Chignik Bay District

Year	Chinook Number	Chinook Pounds	Chinook Average Weight	Sockeye Number	Sockeye Pounds	Sockeye Average Weight	Coho Number	Coho Pounds	Coho Average Weight	Pink Number	Pink Pounds	Pink Average Weight	Chum Number	Chum Pounds	Chum Average Weight
1983	3,560	80,193	22.5	1,597,059	10,536,850	6.6	29,519	250,786	8.5	27,284	97,222	3.6	16,747	130,154	7.8
1984	3,696	93,096	25.2	1,942,822	13,579,107	7.0	72,722	658,240	9.1	165,178	670,923	4.1	8,173	61,159	7.5
1985	1,810	43,396	24.0	812,605	4,820,590	5.9	156,579	1,431,798	9.1	14,429	55,900	3.9	4,906	31,307	6.4
1986	2,592	60,723	23.4	1,389,172	9,488,499	6.8	60,197	481,706	8.0	191,264	767,714	4.0	18,167	134,735	7.4
1987	1,931	42,848	22.2	1,559,757	11,508,187	7.4	77,333	654,640	8.5	13,887	51,855	3.7	5,163	38,429	7.4
1988	4,331	96,241	22.2	529,540	3,873,621	7.3	94,292	819,677	8.7	119,794	460,519	3.8	7,013	55,911	8.0
1989	3,532	76,491	21.7	1,156,782	7,950,548	6.9	68,231	559,127	8.2	27,691	94,218	3.4	1,587	11,546	7.3
1990	3,719	80,915	21.8	1,400,069	9,374,800	6.7	61,260	497,901	8.1	94,528	319,928	3.4	11,460	77,739	6.8
1991	1,996	47,206	23.7	1,487,421	10,196,187	6.9	56,574	481,741	8.5	76,163	231,960	3.0	17,545	115,553	6.6
1992	3,181	67,840	21.3	792,889	5,177,003	6.5	80,946	676,752	8.4	178,105	729,324	4.1	12,711	79,207	6.2
1993	5,240	85,848	16.4	762,730	4,675,799	6.1	48,808	349,816	7.2	55,909	174,334	3.1	8,116	44,235	5.5
1994	1,808	36,773	20.3	908,042	5,696,656	6.3	70,541	669,451	9.5	59,425	261,622	4.4	25,250	174,189	6.9
10-Year [a] Average Weight			21.7			6.7			8.4			3.7			6.9

Salmon Caught in all other Districts

Year	Chinook Number	Chinook Pounds	Chinook Average Weight	Sockeye Number	Sockeye Pounds	Sockeye Average Weight	Coho Number	Coho Pounds	Coho Average Weight	Pink Number	Pink Pounds	Pink Average Weight	Chum Number	Chum Pounds	Chum Average Weight
1983	1,928	15,966	8.3	227,116	1,389,979	6.1	32,408	237,417	7.3	293,894	1,103,666	3.8	142,665	1,075,112	7.5
1984	622	6,471	10.4	717,797	4,957,180	6.9	37,406	291,725	7.8	279,626	980,326	3.5	55,130	424,808	7.7
1985	78	1,508	19.3	109,546	629,469	5.7	34,609	278,049	8.0	145,699	587,831	4.0	17,900	113,974	6.4
1986	445	6,049	13.6	256,662	1,766,361	6.9	56,436	385,489	6.8	455,861	1,606,597	3.5	158,473	1,169,683	7.4
1987	720	6,634	9.2	339,081	2,493,527	7.4	73,081	535,163	7.3	232,888	847,705	3.6	122,098	905,512	7.4
1988	2,965	32,639	11.0	266,301	1,840,831	6.9	276,128	2,069,750	7.5	2,877,365	10,262,986	3.6	260,762	2,140,466	8.2
1989	10	207	20.7	2,505	18,732	7.5	2	13	6.5	21	51	2.4	37	342	9.2
1990	6,182	53,350	8.6	693,581	4,434,969	6.4	68,871	435,844	6.3	455,480	1,355,716	3.0	258,544	1,679,280	6.5
1991	1,161	19,497	16.8	408,244	2,748,265	6.7	109,051	701,216	6.4	1,093,085	3,125,671	2.9	243,551	1,560,646	6.4
1992	7,651	70,250	9.2	484,560	3,195,899	6.6	229,997	1,685,939	7.3	1,376,968	5,069,835	3.7	209,423	1,513,119	7.2
1993	14,275	148,405	10.4	934,621	5,586,833	6.0	180,651	1,111,428	6.2	1,592,468	5,139,463	3.2	114,244	691,812	6.1
1994	2,111	35,092	16.6	710,931	4,449,179	6.3	166,663	1,327,375	8.0	371,638	1,233,037	3.3	202,026	1,456,822	7.2
10-Year [a] Average Weight			13.5			6.6			7.0			3.3			7.2

[a] Ten-Year average weight was calculated using 1985-1994 data, including 1989 (oil spill year) where openings and closures were restricted.

Table 7. Area processors in the Chignik Management Area, 1994.

F0142
Peter Pan Seafoods
2200 6th Ave., Suite 1000
Seattle, Wa. 98121

F0365
Chignik Pride Fisheries
4241 21st Ave. W., Suite 300
Seattle, Wa. 98199

F1662
Aleutian Dragon Fisheries
P.O. Box 70668
Seattle, Wa. 98107

F09040, F0942
Trident Seafoods Corp.
Seattle, Wa. 99661

F1039
Inlet Fisheries, Inc.
P.O. Box 530
Kenai, Ak. 99611

F1084
Crusader Fisheries, Inc.
4225 23rd Ave., W.
Seattle, Wa 98199

F9668
Alaskan Leader Fisheries
P.O. Box 569
Kenai, Ak.

Table 8. Commercial salmon catches in the Chignik Management Area by year, 1960-1994.[a,b]

	Number of Fish					
Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	643	715,969	8,933	557,327	486,699	1,769,571
1961	409	322,890	3,088	443,510	178,760	948,657
1962	435	364,753	1,292	1,519,305	364,335	2,250,120
1963	1,744	408,606	9,933	1,662,363	112,697	2,195,343
1964	1,099	556,890	2,735	1,682,365	333,336	2,576,425
1965	1,592	599,553	9,602	1,118,158	120,589	1,849,494
1966	636	219,794	16,050	683,215	238,883	1,158,578
1967	882	462,000	13,150	108,981	75,543	660,556
1968	674	977,382	2,200	1,290,660	223,861	2,494,777
1969	3,448	394,135	18,103	1,779,736	67,721	2,263,143
1970	1,226	1,325,734	15,348	1,157,172	437,252	2,936,732
1971	2,010	1,016,136	14,557	612,290	353,952	1,998,945
1972	464	378,218	19,615	72,161	78,298	548,756
1973	525	870,354	22,322	25,472	8,717	927,390
1974	255	662,905	12,245	69,515	34,312	779,232
1975	549	399,593	53,283	66,165	25,161	544,751
1976	2,290	1,163,728	35,167	395,287	81,403	1,677,875
1977	710	1,972,207	17,430	604,806	110,452	2,705,605
1978	1,603	1,576,283	20,212	985,114	120,889	2,704,101
1979	1,253	1,049,497	99,129	1,905,198	188,907	3,243,984
1980	2,344	859,966	119,573	1,093,184	252,521	2,327,588
1981	2,694	1,839,469	78,805	1,162,613	580,332	3,663,913
1982	5,236	1,521,686	300,273	873,384	390,096	3,090,675
1983	5,488	1,824,175	61,927	321,178	159,412	2,372,180
1984	4,318	2,660,619	110,128	444,804	63,303	3,283,172
1985	1,888	922,151	191,188	160,128	22,806	1,298,161
1986	3,037	1,645,834	116,633	647,125	176,640	2,589,269
1987	2,651	1,898,838	150,414	246,775	127,261	2,425,939
1988	7,296	795,841	370,420	2,997,159	267,775	4,438,491
1989	3,542	1,159,287	68,233	27,712	1,624	1,260,398
1990	9,901	2,093,650	130,131	550,008	270,004	3,053,694
1991	3,157	1,895,665	165,625	1,169,248	261,096	3,494,791
1992	10,832	1,277,449	310,943	1,554,073	222,134	3,375,431
1993	19,515	1,697,351	229,459	1,648,397	122,360	3,717,082
1994	3,919	1,618,973	237,204	431,063	227,276	2,518,435
Avg (1965-94)	3,465	1,225,949	100,312	806,693	177,019	2,313,438
Avg (1975-94)	4,611	1,493,613	143,309	864,171	183,573	2,689,277
Avg (1985-94)	6,574	1,500,504	197,025	943,169	169,898	2,817,169

[a]Catch does not include Cape Igvak or Southeastern District Mainland Area.

[b]Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 9. Estimated salmon escapement by district and statistical area in the Chignik Management Area, 1994.

District	Stat Area	Chinook	Sockeye	Coho[a]	Pink[b]	Chum[a]	Total
Chignik Bay	271-10	3,016	966,909	55,483	75,800	1,500	1,102,708
Total		3,016	966,909	55,483	75,800	1,500	1,102,708
Central	272-20	0	0	100	78,800	5,000	83,900
	272-30	0	0	1,000	21,500	8,933	31,433
	272-50	0	0	500	78,620	88,700	167,820
	Total	0	0	1,600	178,920	102,633	283,153
Eastern	272-60	0	2,000	6,700	122,100	44,200	175,000
	272-70	0	0	5,600	89,487	6,657	101,744
	272-72	0	0	1,400	62,290	4,633	68,323
	272-80	0	0	11,800	159,910	22,600	194,310
	272-90	0	0	6,200	260,463	23,000	289,663
	272-92	0	0	0	14,000	3,000	17,000
	272-96	0	6,000	0	155,000	25,100	186,100
Total		0	8,000	31,700	863,250	129,190	1,032,140
Western	273-70	0	0	0	17,000	7,500	24,500
	273-72	0	0	0	38,767	0	38,767
	273-80	0	0	0	7,000	200	7,200
	273-82	0	0	0	4,530	2,550	7,080
	273-84	0	0	0	23,333	11,750	35,083
	273-94	0	0	0	21,000	1,000	22,000
Total		0	0	0	111,630	23,000	134,630
Perryville	275-40	0	0	0	89,614	123,722	213,336
	275-50	0	0	0	63,500	2,000	65,500
	275-60	0	0	0	767	307	1,074
Total		0	0	0	153,881	126,029	279,910
All District Total		3,016	974,909	88,783	1,383,481	382,352	2,832,541

[a] Coho salmon estimates for Chignik Lagoon were from methods from Reggarone (1989). Coho salmon surveys were incomplete because of budget constaints.

[b] Escapement estimates for pink and chum salmon were based on methods of Johnson and Barrett (1988).

Table 10. Economic value of salmon and average income per commercial salmon permit holder, in dollars, in the Chignik Management Area, 1970-1995.

	Chinook		Sockeye		Coho		Pink		Chum			Number Of	Total Value
Date	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Total value	Permits Fished	Per Permit
1970	6,129	89	2,190,272	31,743	18,397	267	635,673	9,213	376,025	5,450	3,226,496	69	46,761
1971	6,472	84	2,034,279	26,419	23,240	302	366,693	4,762	326,760	4,244	2,757,444	77	35,811
1972	2,028	28	825,498	11,308	35,699	489	48,401	663	87,759	1,202	999,385	79	12,650
1973	5,255	72	3,030,057	41,508	73,663	1,009	20,610	282	10,180	139	3,139,765	77	40,776
1974	2,941	32	3,618,781	39,767	31,933	351	64,069	704	51,125	562	3,768,849	94	40,094
1975	6,561	76	1,384,271	16,240	213,539	2,581	104,115	12,211	61,704	717	1,770,190	86	20,584
1976	13,800	179	4,751,000	61,701	138,000	1,792	568,300	7,381	183,600	2,384	5,654,700	77	73,438
1977	18,828	212	14,553,720	163,525	104,819	1,178	920,881	10,347	368,066	4,136	15,966,314	88	181,435
1978	56,700	597	15,653,500	164,774	116,400	1,225	1,131,500	11,911	404,500	4,258	17,362,600	95	182,764
1979	32,050	317	11,345,503	112,332	710,192	7,031	2,622,269	25,963	126,866	1,256	14,836,880	101	146,900
1980	67,857	670	5,532,290	54,775	520,655	5,155	1,477,060	14,624	1,061,963	10,514	8,659,625	101	85,739
1981	75,231	730	17,262,119	167,593	439,900	4,271	1,881,334	18,265	2,431,421	23,606	22,090,005	103	214,466
1982	75,276	717	13,038,510	124,176	1,782,027	16,972	578,184	5,506	1,356,597	12,920	16,830,594	105	160,291
1983	96,159	962	10,728,088	107,281	219,650	2,197	240,171	2,402	421,713	4,217	11,705,781	100	117,058
1984	114,502	1,134	20,402,076	202,000	759,972	7,525	330,916	3,276	146,024	1,446	21,753,490	101	215,381
1985	67,088	664	7,997,834	79,186	1,471,418	14,568	140,076	1,387	59,475	589	8,735,891	101	86,494
1986	84,800	848	16,882,290	168,823	667,740	6,677	356,147	3,562	456,546	4,565	18,447,523	100	184,475
1987	72,739	706	24,783,033	240,612	1,035,129	10,050	269,868	2,620	339,819	3,299	26,500,588	102	259,810
1988	286,740	2,811	14,350,354	140,690	4,153,424	40,720	6,771,266	66,385	2,189,293	21,464	27,751,077	102	272,069
1989[a]	78,999	790	13,047,378	130,474	436,892	4,369	32,994	3,299	4,745	47	13,601,008	100	136,010
1990	185,256	1,834	22,509,923	222,871	700,309	6,934	502,693	4,977	878,510	8,698	24,776,691	101	245,314
1991	50,027	486	11,002,784	106,823	650,626	6,317	402,916	3,912	502,860	4,882	12,609,213	101	124,844
1992	193,326	1,858	12,552,025	120,693	1,323,107	12,722	811,882	7,807	414,005	3,981	15,294,345	101	151,429
1993	175,690	1,722	8,210,106	80,491	730,622	7,163	637,666	6,252	184,012	1,804	9,938,096	102	97,432
1994	38,096	385	10,046,245	101,477	1,094,415	11,055	226,504	2,208	430,888	4,352	11,836,148	99	119,557
1995	60,174	602	11,969,210	119,692	834,337	8,343	977,811	9,778	634,780	6,348	14,476,312	100	144,763
10-yr average 1985-1995													
	122,585	1,204	14,535,335	143,265	1,162,660	11,435	1,098,975	11,080	603,546	5,944	17,523,100	101	173,570

[a] Oil Spill Year

Table 11. Chignik River chinook escapement and Chignik Management Area catch, 1960 - 1994.[a]

Year	Escapement	Catch	Total Run
1960	-	643	643
1961	-	409	409
1962	-	435	435
1963	564	1,744	2,308
1964	914	1,099	2,013
1965	942	1,592	2,534
1966	822	636	1,458
1967	1,500	882	2,382
1968	1,000	674	1,674
1969	600	3,448	4,048
1970	2,500	1,226	3,726
1971	2,000	2,010	4,010
1972	1,500	464	1,964
1973	822	525	1,347
1974	672	255	927
1975	877	549	1,426
1976	700	2,290	2,990
1977	798	710	1,508
1978	1,197	1,603	2,800
1979	1,050	1,253	2,303
1980	876	2,344	3,220
1981	1,603	2,694	4,297
1982	2,412	5,236	7,648
1983	1,943	5,488	7,431
1984	5,806	4,318	10,124
1985	3,144	1,888	5,032
1986	3,612	3,037	6,649
1987	2,624	2,651	5,275
1988	4,868	7,296	12,164
1989	3,316	3,542	6,858
1990	4,364	9,901	14,265
1991	4,545	3,157	7,702
1992	3,806	10,832	14,638
1993	1,946	19,515	21,461
1994	3,016	3,919	6,935
Avg (1965-94)	2,162	3,465	5,626
Avg (1975-94)	2,625	4,611	7,236
Avg (1985-94)	3,524	6,574	10,098

[a] No escapement adjustments are made for chinook salmon that escape after the weir is removed, those that spawn below the weir, or those removed by the sport fishery.

Table 12. Daily chinook salmon escapement estimates through the Chignik weir by day, 1994.[a]

Date	Escapement		Date	Escapement	
	Daily	Cumulative		Daily	Cumulative
May-31	0	0	Jul-09	111	863
Jun-01	0	0	Jul-10	162	1,025
Jun-02	0	0	Jul-11	71	1,096
Jun-03	0	0	Jul-12	116	1,212
Jun-04	0	0	Jul-13	103	1,315
Jun-05	0	0	Jul-14	15	1,330
Jun-06	0	0	Jul-15	105	1,435
Jun-07	0	0	Jul-16	268	1,703
Jun-08	0	0	Jul-17	143	1,899
Jun-09	0	0	Jul-18	223	2,122
Jun-10	0	0	Jul-19	82	2,204
Jun-11	0	0	Jul-20	189	2,393
Jun-12	0	0	Jul-21	38	2,433
Jun-13	0	0	Jul-22	54	2,485
Jun-14	0	0	Jul-23	62	2,547
Jun-15	0	0	Jul-24	76	2,623
Jun-16	4	4	Jul-25	40	2,663
Jun-17	1	5	Jul-26	53	2,716
Jun-18	0	5	Jul-27	16	2,732
Jun-19	1	6	Jul-28	21	2,753
Jun-20	18	24	Jul-29	7	2,760
Jun-21	6	30	Jul-30	13	2,773
Jun-22	20	50	Jul-31	15	2,788
Jun-23	6	56	Aug-01	12	2,800
Jun-24	18	74	Aug-02	21	2,821
Jun-25	14	88	Aug-03	12	2,833
Jun-26	0	88	Aug-04	12	2,845
Jun-27	6	94	Aug-05	36	2,881
Jun-28	14	108	Aug-06	41	2,922
Jun-29	32	140	Aug-07	10	2,932
Jun-30	7	147	Aug-08	24	2,956
Jul-01	20	167	Aug-09	12	2,968
Jul-02	0	167	Aug-10	0	2,968
Jul-03	38	205	Aug-11	6	2,974
Jul-04	13	318	Aug-12	18	2,992
Jul-05	126	444	Aug-13	18	3,010
Jul-06	70	514	Aug-14	6	3,016
Jul-07	69	583	Aug-15	Weir Out	
Jul-08	169	752			

[a]No escapement adjustments are made for chinook salmon that escape after the weir is removed, those that spawn below the weir, or those removed by the sport fishery.

Table 13. Daily sockeye salmon escapement estimates through the Chignik weir by day, 1994.

Date	Escapement Daily	Escapement Cumulative	Date	Escapement Daily	Escapement Cumulative
31-May	149	149	9-Jul	1,859	678,691
1-Jun	128	277	10-Jul	3,507	682,198
2-Jun	211	488	11-Jul	2,349	684,547
3-Jun	348	836	12-Jul	6,086	690,633
4-Jun	143	979	13-Jul	7,141	697,774
5-Jun	94	1,073	14-Jul	1,545	699,319
6-Jun	107	1,180	15-Jul	3,254	702,573
7-Jun	1,213	2,393	16-Jul	5,020	707,593
8-Jun	1,505	3,898	17-Jul	11,488	719,081
9-Jun	1,561	5,459	18-Jul	38,049	757,130
10-Jun	6,349	11,808	19-Jul	20,478	777,608
11-Jun	12,971	24,779	20-Jul	8,659	786,267
12-Jun	10,922	35,701	21-Jul	5,282	791,549
13-Jun	15,314	51,015	22-Jul	40,071	831,620
14-Jun	23,195	74,210	23-Jul	23,722	855,342
15-Jun	26,816	101,026	24-Jul	3,510	858,852
16-Jun	18,997	120,023	25-Jul	2,159	861,011
17-Jun	32,169	152,192	26-Jul	2,304	863,315
18-Jun	32,438	184,630	27-Jul	15,155	878,470
19-Jun	20,853	205,483	28-Jul	8,814	887,284
20-Jun	83,445	288,928	29-Jul	2,827	890,111
21-Jun	71,041	359,969	30-Jul	2,743	892,854
22-Jun	77,393	437,362	31-Jul	2,438	895,292
23-Jun	84,989	522,351	1-Aug	3,918	899,210
24-Jun	79,341	601,692	2-Aug	4,855	903,065
25-Jun	44,474	646,166	3-Aug	4,769	908,834
26-Jun	2,906	649,072	4-Aug	2,795	911,629
27-Jun	7,248	656,320	5-Aug	2,040	913,669
28-Jun	2,063	658,383	6-Aug	1,146	914,815
29-Jun	2,250	660,633	7-Aug	1,321	916,136
30-Jun	830	661,463	8-Aug	3,876	920,012
1-Jul	650	662,113	9-Aug	3,399	923,411
2-Jul	1,296	663,409	10-Aug	2,026	925,437
3-Jul	1,162	664,571	11-Aug	608	926,045
4-Jul	2,135	666,706	12-Aug	820	926,865
5-Jul	1,523	668,229	13-Aug	839	927,704
6-Jul	2,587	670,816	14-Aug	2,362	930,066
7-Jul	3,049	673,865	15-Aug[a]	Weir Removed	
8-Jul	2,967	676,832	Post Weir	36,843	966,909

[a] Time series analysis using the relationship of catch and escapement was used to estimate sockeye escapement after the weir was removed on August 15 through September 24.

Table 14. Sockeye salmon age composition for Black Lake from scale samples collected from the Black Lake outlet, 1994.

Dates	Sample Size (n)	Percent Compostion									
		0.2	0.3	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4
19-Jun	272	0	1.1	0	33.8	31.6	0.4	0.4	9.2	22.8	0.7
20-Jun	292	0	1	0.3	27.1	29.1	0	0.3	7.5	34.6	0
21-Jun	399	0	1.8	0	24.3	33.6	0	0	6.3	34.1	0
22-Jun	603	0	1.5	0.2	19.7	35.5	0	0	6.5	36.3	0.3
23-Jun	214	0.5	3.7	0	18.7	36.4	0	0	4.7	36	0
	1,780	0.1	1.7	0.1	24	33.5	0.1	0.1	6.8	33.4	0.2

Table 15. Sockeye and chinook salmon age composition for Chignik Lagoon as determined from commercial fishery scale samples, 1994.

	Sample Size	Sockeye Age Composition (Percent)														
Dates	(n)	0.2	0.3	0.4	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4
6-Jun	521	0.0	1.3	0.0	0.2	10.0	31.5	0.0	0.0	8.1	48.2	0.8	0.0	0.0	0.0	0.0
14-Jun	514	0.0	1.9	0.0	0.0	10.9	33.9	0.0	0.0	5.6	47.5	0.2	0.0	0.0	0.0	0.0
16-Jun	426	0.0	1.2	0.0	0.2	17.8	33.1	0.2	0.0	9.2	38.0	0.0	0.0	0.0	0.2	0.0
18-Jun	303	0.0	1.3	0.0	0.0	9.2	35.0	0.7	0.0	10.2	43.6	0.0	0.0	0.0	0.0	0.0
20-Jun	501	0.0	1.2	0.0	0.0	6.0	41.9	0.0	0.0	6.8	43.7	0.4	0.0	0.0	0.0	0.0
26-Jun	486	0.2	2.7	0.0	0.0	6.8	42.4	0.2	0.2	4.7	42.2	0.4	0.0	0.2	0.0	0.0
29-Jun	484	0.2	1.7	0.0	0.0	8.7	47.7	0.4	0.6	3.3	37.4	0.0	0.0	0.0	0.0	0.0
2-Jul	523	0.0	2.5	0.0	0.0	7.1	47.0	0.2	0.0	5.4	37.5	0.4	0.0	0.0	0.0	0.0
5-Jul	510	0.0	1.4	0.2	0.0	5.1	44.5	0.2	0.6	3.7	44.1	0.2	0.0	0.0	0.0	0.0
7-Jul	522	0.0	0.8	0.0	0.2	2.9	46.7	0.2	0.2	3.4	45.0	0.4	0.0	0.2	0.0	0.0
10-Jul	531	0.0	0.9	0.2	0.0	3.0	48.0	0.0	0.0	3.2	43.7	0.0	0.0	0.0	0.9	0.0
13-Jul	526	0.0	0.6	0.0	0.0	3.2	47.0	0.2	0.4	6.5	39.2	0.2	0.0	0.0	2.9	0.0
17-Jul	525	0.0	0.4	0.0	0.0	2.3	39.2	0.4	0.2	12.4	40.0	0.4	0.0	0.0	4.8	0.0
24-Jul	485	0.0	0.6	0.2	0.0	2.1	46.4	0.4	0.4	8.9	34.0	0.0	0.0	0.2	6.8	0.0
28-Jul	505	0.0	0.0	0.0	0.0	1.2	47.3	0.2	0.0	10.7	23.4	0.2	0.0	0.2	16.8	0.0
3-Aug	503	0.0	0.0	0.0	0.0	1.0	40.6	0.4	0.2	19.9	24.1	1.2	0.0	0.6	11.9	0.2
10-Aug	557	0.0	0.5	0.2	0.0	0.9	33.4	0.5	0.2	23.2	18.7	3.4	0.0	1.4	17.2	0.4
12-Aug	496	0.0	0.2	0.0	0.2	2.2	33.1	0.6	0.0	28.4	12.5	2.2	0.2	1.0	19.4	0.0
18-Aug	496	0.2	0.6	0.0	0.4	1.0	31.0	0.4	0.0	24.2	16.1	2.2	0.2	1.0	22.2	0.4
24-Aug	506	0.0	0.6	0.0	0.0	2.2	21.5	0.2	0.2	32.6	11.9	2.6	0.4	2.0	25.9	0.0
Total=	9,920	0.0	1.0	0.0	0.1	5.0	39.7	0.3	0.2	11.6	34.4	0.8	0.0	0.4	6.6	0.1
Age Class:						1.2	1.3			2.2	2.3				3.3	
Mean Length in Millimeters:						469	566			485	566				566	

Sample Size	Chinook Salmon Age Composition (Percent)						
(n)	1.1	1.2	1.3	1.4	1.5	2.3	2.4
139	2.9	6.5	49.6	36.0	1.4	2.2	1.4

Table 16. Sockeye salmon escapement through the Chignik River weir for Chignik Lake and Black Lake using daily percentages derived from the inseason scale pattern analysis time of entry curve, 1994.

Date	Daily	Total Cumulative	Chignik Lake Percent	Chignik Lake Daily	Chignik Lake Cumulative	Black Lake Cumulative
31-May	149	149	0	0	0	149
1-Jun	128	277	0	0	0	277
2-Jun	211	488	0	0	0	488
3-Jun	348	836	0	0	0	836
4-Jun	143	979	0	0	0	979
5-Jun	94	1,073	0	0	0	1,073
6-Jun	107	1,180	0	0	0	1,180
7-Jun	1,213	2,393	0	0	0	2,393
8-Jun	1,505	3,898	0.001	2	2	3,896
9-Jun	1,561	5,459	0.002	3	5	5,454
10-Jun	6,349	11,808	0.003	19	24	11,784
11-Jun	12,971	24,779	0.004	52	76	24,703
12-Jun	10,922	35,701	0.005	55	131	35,570
13-Jun	15,314	51,015	0.006	92	223	50,792
14-Jun	23,195	74,210	0.011	255	478	73,732
15-Jun	26,816	101,026	0.018	483	961	100,065
16-Jun	18,997	120,023	0.025	475	1,436	118,587
17-Jun	32,169	152,192	0.033	1,062	2,498	149,694
18-Jun	32,438	184,630	0.039	1,265	3,763	180,867
19-Jun	20,853	205,483	0.054	1,126	4,889	200,594
20-Jun	83,445	288,928	0.074	6,175	11,064	277,864
21-Jun	71,041	359,969	0.085	6,038	17,102	342,867
22-Jun	77,393	437,362	0.09	6,965	24,067	413,295
23-Jun	84,989	522,351	0.112	9,519	33,586	488,765
24-Jun	79,341	601,692	0.127	10,076	43,662	558,030
25-Jun	44,474	646,166	0.144	6,404	50,066	596,100
26-Jun	2,906	649,072	0.151	439	50,505	598,567
27-Jun	7,248	656,320	0.158	1,145	51,650	604,670
28-Jun	2,063	658,383	0.165	340	51,990	606,393
29-Jun	2,250	660,633	0.174	392	52,382	608,251
30-Jun	830	661,463	0.193	160	52,542	608,921
1-Jul	650	662,113	0.236	153	52,695	609,418
2-Jul	1,296	663,409	0.262	340	53,035	610,374
3-Jul	1,162	664,571	0.284	330	53,365	611,206
4-Jul	2,135	666,706	0.305	651	54,016	612,690
5-Jul	1,523	668,229	0.325	495	54,511	613,718
6-Jul	2,587	670,816	0.346	895	55,406	615,410
7-Jul	3,049	673,865	0.364	1,110	56,516	617,349
8-Jul	2,967	676,832	0.368	1,092	57,608	619,224
9-Jul	1,859	678,691	0.405	753	58,361	620,330
10-Jul	3,507	682,198	0.421	1,476	59,837	622,361
11-Jul	2,349	684,547	0.437	1,027	60,864	623,683
12-Jul	6,086	690,633	0.454	2,763	63,627	627,006
13-Jul	7,141	697,774	0.471	3,363	66,990	630,784

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Table 16. (page 2 of 2)

Date	Daily	Total Cumulative	Chignik Lake Percent	Chignik Lake Daily	Chignik Lake Cumulative	Black Lake Cumulative
14-Jul	1,545	699,319	0.489	756	67,746	631,573
15-Jul	3,254	702,573	0.514	1,436	69,182	633,391
16-Jul	5,020	707,593	0.529	2,656	72,075	635,518
17-Jul	11,488	719,081	0.572	6,571	78,646	640,435
18-Jul	38,049	757,130	0.61	23,210	101,856	655,274
19-Jul	20,478	777,608	0.657	13,454	115,310	662,298
20-Jul	8,659	786,267	0.692	5,992	121,302	664,965
21-Jul	5,282	791,549	0.741	3,914	125,216	666,333
22-Jul	40,071	831,620	0.782	31,336	156,551	675,069
23-Jul	23,722	855,342	0.814	19,310	175,861	679,481
24-Jul	3,510	858,852	0.841	2,952	178,813	680,039
25-Jul	2,159	861,011	0.858	1,852	180,665	680,346
26-Jul	2,304	863,315	0.884	2,037	182,702	680,613
27-Jul	15,155	878,470	0.921	13,958	196,660	681,810
28-Jul	8,814	887,284	0.942	8,303	204,962	682,322
29-Jul	2,827	890,111	0.967	2,734	207,696	682,415
30-Jul	2,743	892,854	0.984	2,699	210,395	682,459
31-Jul	2,438	895,292	1	2,438	212,833	682,459
1-Aug	3,918	899,210	1	3,918	216,751	682,459
2-Aug	4,855	904,065	1	4,855	221,606	682,459
3-Aug	4,769	908,834	1	4,769	226,375	682,459
4-Aug	2,795	911,629	1	2,795	229,170	682,459
5-Aug	2,040	913,669	1	2,040	231,210	682,459
6-Aug	1,146	914,815	1	1,146	232,356	682,459
7-Aug	1,321	916,136	1	1,321	233,677	682,459
8-Aug	3,876	920,012	1	3,876	237,553	682,459
9-Aug	3,399	923,411	1	3,399	240,952	682,459
10-Aug	2,026	925,437	1	2,026	242,978	682,459
11-Aug	608	926,045	1	608	243,586	682,459
12-Aug	820	926,865	1	820	244,406	682,459
13-Aug	839	927,704	1	839	245,245	682,459
14-Aug	2,362	930,066	1	2,362	247,607	682,459
15-Aug	Weir Removed					

Table 17. Harvest of Chignik bound sockeye salmon in the Chignik, Cape Igvak, and Southeast District Mainland Areas[a] from 1964-1994.

Year	Chignik Area Catch	Chignik Area Percent	Cape Igvak Catch	Cape Igvak Percent	Mainland Area Catch	Mainland Area Percent	Total All Areas
1964[b]	556,890	90.57	14,980	2.44	43,021	7.00	614,891
1965	599,553	89.94	11,021	1.65	56,020	8.40	666,594
1966	219,794	87.99	18,003	7.21	12,011	4.81	249,808
1967	462,000	91.48	23,014	4.56	20,021	3.96	505,035
1968	977,382	82.53	135,951	11.48	70,959	5.99	1,184,292
1969	394,135	78.96	97,982	19.63	7,013	1.41	499,130
1970[c]	1,325,734	72.51	434,394	23.76	68,181	3.73	1,828,309
1971	1,016,136	80.33	197,614	15.62	51,272	4.05	1,265,022
1972	378,218	87.99	33,865	7.88	17,752	4.13	429,815

1964-72 catch and percentage figures are total for the entire season. Catch figures and percentages after 1972 are only through July 25.

1973[d]	769,258	89.01	57,348	6.64	37,613	4.35	864,219
1974	530,278	73.97	122,071	17.03	64,564	9.01	716,913
1975	115,984	81.78	23,635	16.67	2,205	1.55	141,824
1976	792,024	83.08	117,926	12.37	43,356	4.55	953,306
1977	1,547,285	90.61	128,852	7.55	31,498	1.84	1,707,635
1978[e,f]	1,454,389	85.38	227,014	13.33	21,952	1.29	1,703,355
1979[g]	794,504	91.98	13,950	1.61	55,352	6.41	863,806
1980	670,001	91.33	32	0.00	63,570	8.67	733,603
1981	1,606,300	79.88	282,727	14.06	121,870	6.06	2,010,897
1982	1,250,768	84.46	167,401	11.30	62,767	4.24	1,480,936
1983	1,450,832	72.68	318,048	15.93	227,392	11.39	1,996,272
1984	2,474,405	73.93	449,372	13.43	423,068	12.64	3,346,845
1985[h]	696,169	79.91	123,627	14.19	51,421	5.90	871,217
1986	1,456,729	82.64	188,017	10.67	118,006	6.69	1,762,752
1987	1,659,915	77.98	321,746	15.12	146,886	6.90	2,128,547
1988	678,912	95.70	11,218	1.58	19,320	2.72	709,450
1989	502,477	99.12	0	0.00	4,485	0.88	506,962
1990	1,211,097	83.67	107,706	7.44	128,599	8.88	1,447,402
1991[i]	1,966,986	80.48	324,329	13.27	152,714	6.25	2,444,029
1992[j]	1,066,732	81.25	152,358	11.60	93,845	7.15	1,312,935
1993	1,500,459	77.78	300,055	15.55	128,536	6.63	1,929,050
1994[k]	1,641,574	80.70	250,230	12.30	142,350	7.00	2,034,154

[a] The Cape Igvak and Southeast District Mainland figures represent 80% of the total sockeye catches for those areas as it is estimated that roughly 80% of the sockeye caught in the Cape Igvak section and Southeast District Mainland Area (excluding sockeye caught in Northwest Stepovak Section from 1964-1991 and in Orzinski bay in 1992) are destined for Chignik.

[b] The data from 1964-1972 are based on total yearly catches. Prior to 1973, Cape Igvak and Southeast District Mainland fisheries were set by regulation to weekly fishing periods, usually 5 days per week. Time modifications were implemented when poor escapements occurred at Chignik.

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[c] Catches (1970-1992) were updated using historical electronic fish ticket databases.

[d] During 1973 through 1977 all three fisheries were managed on a day by day basis.

[e] From 1978-1991, the Cape Igvak Fishery Management Plan allocated 15 percent of the total sockeye catch destined for Chignik.

[f] During 1978, seining prior to July 11 was disallowed in the Southeast District Mainland. The set gillnet fishery was allowed to fish 3 days per week through July 10 after which the fishery was managed on the basis of local stocks.

[g] During 1979-1984 and prior to July 11, fishing was allowed 5 days per week in the Southeast District Mainland Area with a ceiling of an estimated 60,000 sockeye destined for Chignik. If the Chignik Area sockeye catch was 1,000,000 or more before July 11, the 60,000 ceiling was to be dropped.

[h] Beginning in 1985, Southeast District Mainland Area (excluding the Northwest Stepovak Section from 1964-1991 and Orzinski Bay statistical area) was placed on an allocation of 6.2 percent of the total estimated Chignik sockeye catch through July 25. After July 25, the Southeast District Mainland is managed on a local stock basis. The allocation changed to 6.0 percent beginning in 1988. Seining is still not allowed prior to July 11.

[i] Includes overescapement of 278,305 sockeye counted past the weir during the Chignik Area seiners' boycott (Jun 23-Jul 4).

[j] Review of Orzinski Lake historical and current escapement records led the Alaska Board of Fisheries to redefine the Southeast District Mainland Management Plan. Beginning in 1992, the Southeast District Mainland fishery (excluding Orzinski Bay) was placed on an allocation of 7.0 percent of the total estimated Chignik sockeye catch through July 25.

[k] Includes overescapement of 208,921 sockeye counted past the weir during the Chignik Area seiners' strike (Jun 22-Jun 25).

Table 18. Total Chignik Management Area and 80 percent of the sockeye harvest in the Cape Igvak and Southeast Mainland Areas, 1964-1994.[a]

	Harvest to July 25 Only				Harvest for Entire Season			
Year	Chignik	Igvak	Mainland	Total	Chignik	Igvak	Mainland	Total
1964	-	-	-	-	556,890	14,980	43,021	614,891
1965	-	-	-	-	599,553	11,021	56,020	666,594
1966	-	-	-	-	219,794	18,003	12,011	249,808
1967	-	-	-	-	462,000	23,014	20,021	505,035
1968	-	-	-	-	977,382	135,951	70,959	1,184,292
1969	-	-	-	-	394,135	97,982	7,013	499,130
1970	-	-	-	-	1,325,734	434,394	68,181	1,828,309
1971	-	-	-	-	1,016,136	197,614	51,272	1,265,022
1972	-	-	-	-	378,218	33,865	17,752	429,835
1973	769,258	57,348	37,613	864,219	870,354	57,348	38,266	965,968
1974	530,278	122,071	64,564	716,913	662,905	122,071	65,514	850,490
1975	115,984	23,635	2,205	141,824	399,593	23,635	2,205	425,433
1976	792,024	117,926	43,356	953,306	1,163,728	117,978	44,781	1,326,487
1977	1,547,285	128,852	31,498	1,707,635	1,972,207	128,852	35,401	2,136,460
1978	1,454,389	227,014	21,952	1,703,355	1,576,283	227,052	23,990	1,825,325
1979	794,504	13,950	55,352	863,806	1,049,497	20,436	82,153	1,152,086
1980	670,001	32	63,570	733,603	859,966	631	88,046	948,643
1981	1,606,300	282,727	121,870	2,010,897	1,839,469	284,211	166,034	2,289,714
1982	1,250,768	167,401	62,767	1,480,936	1,521,686	168,295	86,849	1,776,830
1983	1,450,832	318,048	227,392	1,996,272	1,824,175	323,004	297,429	2,444,608
1984	2,474,405	449,372	423,068	3,346,845	2,660,619	450,066	487,938	3,598,623
1985	696,169	123,627	51,421	871,217	922,151	125,134	93,206	1,140,491
1986	1,456,729	188,017	118,006	1,762,752	1,645,834	188,129	147,056	1,981,019
1987	1,659,915	321,746	146,886	2,128,547	1,898,838	344,357	188,983	2,432,178
1988	678,912	11,218	19,320	709,450	795,841	28,783	79,101	903,725
1989	502,477	-	4,485	506,962	1,159,287	-	138,594	1,297,881
1990	1,211,097	107,706	128,599	1,447,402	2,093,650	133,821	216,944	2,444,415
1991[b]	1,966,986	324,329	152,714	2,444,029	2,173,970	341,869	228,934	2,744,773
1992	1,066,732	152,358	93,845	1,312,935	1,277,449	156,318	177,713	1,611,480
1993	1,500,459	300,055	128,536	1,929,050	1,697,351	329,905	222,591	2,249,847
1994[c]	1,641,574	250,230	142,350	2,034,154	1,827,894	257,830	226,562	2,312,286

[a] Catches (1970-1992) were updated using historical electronic fish ticket databases.

[b] Includes overescapement of 278,305 sockeye counted past the weir during the Chignik Area Seiners' boycott (June 23-July 4).

[c] Includes overescapement of 208,921 sockeye counted past the weir during the Chignik Area Seiners' strike (June 22-June 25).

Table 19. Estimated stock composition of age 1.3 Chignik sockeye salmon from commercial catch samples, based on postseason scale pattern analysis, 1994.[a]

Sample Date	Sample Size (n)	Stock	Adjusted Estimate	Estimated Variance	Smoothed Estimate To July 30	Smoothed Estimate To Aug 10
12-Jun	89	Black Lake	0.504	0.01184	0.835	
		Chignik Lake	0.496	0.01184	0.165	
14-Jun	104	Black Lake	1.000	0.01006	0.825	
		Chignik Lake	0.000	0.01006	0.175	
16-Jun	92	Black Lake	0.971	0.01106	0.955	
		Chignik Lake	0.029	0.01106	0.045	
18-Jun	96	Black Lake	0.893	0.01093	0.934	
		Chignik Lake	0.107	0.01093	0.066	
20-Jun	104	Black Lake	0.939	0.01031	0.927	
		Chignik Lake	0.061	0.01031	0.073	
26-Jun	99	Black Lake	0.950	0.01055	0.799	
		Chignik Lake	0.050	0.01055	0.201	
29-Jun	101	Black Lake	0.508	0.01068	0.763	
		Chignik Lake	0.492	0.01068	0.237	
2-Jul	106	Black Lake	0.831	0.00982	0.716	
		Chignik Lake	0.169	0.00982	0.284	
5-Jul	98	Black Lake	0.808	0.01093	0.880	
		Chignik Lake	0.192	0.01093	0.120	
7-Jul	103	Black Lake	1.000	0.01006	0.936	
		Chignik Lake	0.000	0.01006	0.064	
10-Jul	104	Black Lake	1.000	0.01006	0.881	
		Chignik Lake	0.000	0.01006	0.119	
13-Jul	100	Black Lake	0.642	0.01093	0.748	
		Chignik Lake	0.358	0.01093	0.252	
17-Jul	101	Black Lake	0.602	0.01068	0.701	
		Chignik Lake	0.398	0.01068	0.299	
24-Jul	100	Black Lake	0.860	0.18108	0.730	
		Chignik Lake	0.140	0.18108	0.270	
28-Jul	105	Black Lake	0.727	0.01043	0.529	0.762
		Chignik Lake	0.273	0.01043	0.471	0.238
3-Aug	99	Black Lake	0.700	0.01093	0.000	0.569
		Chignik Lake	0.300	0.01093	1.000	0.431
10-Aug	104	Black Lake	0.280	0.00994	0.000	0.327
		Chignik Lake	0.720	0.00994	1.000	0.673

[a] Smoothing was done by a running average of 3, assuring an initial proportion of 0.0 and an ending proportion of 1.0 for Chignik Lake to July 30 and to August 11.

Table 20. Estimated stock composition of age 2.3 Chignik sockeye salmon from commercial catch samples, based on postseason scale pattern analysis, 1994.

Sample Date	Sample Size (n)	Stock	Adjusted Estimate	Estimated Variance	Smoothed Estimate
12-Jun	100	Black Lake	0.856	0.00846	0.807
		Chignik Lake	0.144	0.00846	0.193
14-Jun	97	Black Lake	0.566	0.00881	0.662
		Chignik Lake	0.434	0.00881	0.338
16-Jun	86	Black Lake	0.563	0.00972	0.710
		Chignik Lake	0.437	0.00972	0.290
18-Jun	90	Black Lake	1.000	0.00845	0.806
		Chignik Lake	0.000	0.00845	0.194
20-Jun	97	Black Lake	0.856	0.00863	0.952
		Chignik Lake	0.144	0.00863	0.048
26-Jun	85	Black Lake	1.000	0.08807	0.952
		Chignik Lake	0.000	0.08807	0.048
29-Jun	97	Black Lake	1.000	0.88368	1.000
		Chignik Lake	0.000	0.88368	0.000
2-Jul	97	Black Lake	1.000	0.08368	1.000
		Chignik Lake	0.000	0.08368	0.000
5-Jul	82	Black Lake	1.000	0.00908	1.000
		Chignik Lake	0.000	0.00908	0.000
7-Jul	94	Black Lake	1.000	0.00820	0.955
		Chignik Lake	0.000	0.00820	0.045
10-Jul	95	Black Lake	0.864	0.00872	0.928
		Chignik Lake	0.136	0.00872	0.072
13-Jul	100	Black Lake	0.921	0.00837	0.928
		Chignik Lake	0.079	0.00837	0.072
17-Jul	101	Black Lake	1.000	0.00820	0.974
		Chignik Lake	0.000	0.00820	0.026
24-Jul	97	Black Lake	1.000	0.00837	0.776
		Chignik Lake	0.000	0.00837	0.224
28-Jul	75	Black Lake	0.329	0.01097	0.443
		Chignik Lake	0.671	0.01097	0.557

[a] Smoothing was done by a running average of 3, assuring an initial proportion of 0.0 and ending proportion of 1.0 for Chignik Lake.

Table 21. Daily sockeye salmon escapement, catch by area, and total run (adjusted to Chignik Lagoon date) in the Chignik Management Area, 1994.[a]

Date	Escapement	Chignik Lagoon	Hook Bay /Kujulik	Aniakchak	Eastern District	Cape Igvak	Western District	Perryville District	Southeast Mainland	Daily Total
30-May	149	0	0	0	0	0	0	0	0	149
31-May	128	0	0	0	0	0	0	0	0	128
1-Jun	211	0	0	0	0	0	0	0	0	211
2-Jun	348	0	0	0	0	0	0	0	0	348
3-Jun	143	0	0	0	0	0	0	0	0	143
4-Jun	94	0	0	0	0	0	0	0	0	94
5-Jun	107	0	0	0	0	0	0	0	0	107
6-Jun	1,213	0	0	0	0	0	0	0	0	1,213
7-Jun	1,505	0	0	0	0	0	0	0	0	1,505
8-Jun	1,561	0	0	0	0	0	0	0	0	1,561
9-Jun	6,349	0	0	0	0	0	0	0	0	6,349
10-Jun	12,971	0	0	0	0	0	0	0	0	12,971
11-Jun	10,922	0	0	0	0	0	0	0	0	10,922
12-Jun	15,314	1,061	0	0	0	0	0	0	0	16,375
13-Jun	23,195	0	0	0	0	0	0	0	0	23,195
14-Jun	26,816	1,409	0	0	0	0	0	0	0	28,225
15-Jun	18,997	0	0	0	0	0	0	0	0	18,997
16-Jun	32,169	1,033	0	0	0	0	0	0	0	33,202
17-Jun	32,438	0	0	0	0	0	0	0	0	32,438
18-Jun	20,853	2,412	0	0	0	0	0	0	0	23,265
19-Jun	83,445	0	0	0	0	0	0	0	0	83,445
20-Jun	71,041	2,082	0	0	0	0	0	0	0	73,123
21-Jun	77,393	20,242	0	0	0	0	0	0	0	97,635
22-Jun	84,989	0	0	0	0	0	0	0	0	84,989
23-Jun	79,341	0	0	0	0	0	0	0	0	79,341
24-Jun	44,474	0	0	0	0	0	0	0	0	44,474
25-Jun	2,906	119,210	0	0	0	0	0	0	0	122,116
26-Jun	7,248	67,727	33,542	0	0	0	0	0	0	108,517
27-Jun	2,063	33,693	21,772	20,188	0	0	0	0	0	77,716
28-Jun	2,250	19,578	18,592	10,449	0	0	0	0	4,698	55,567
29-Jun	830	21,539	19,893	15,677	755	59,509	0	0	19,087	137,290
30-Jun	650	16,788	22,352	16,021	1,819	49,570	0	0	0	107,200
1-Jul	1,296	16,258	20,655	10,071	5,028	50,606	0	0	7,449	111,363
2-Jul	1,162	22,723	19,823	5,307	407	46,529	0	0	21,885	117,836
3-Jul	2,135	22,571	23,105	19,076	0	17,813	0	0	17,792	102,492
4-Jul	1,523	16,045	24,790	13,000	0	0	0	0	0	55,358
5-Jul	2,587	18,229	28,474	16,874	0	0	0	0	0	66,164
6-Jul	3,049	20,924	22,475	13,029	0	0	0	0	0	59,477
7-Jul	2,967	30,970	20,994	14,688	0	0	0	0	0	69,619
8-Jul	1,859	26,131	24,739	11,505	0	0	0	0	0	64,234
9-Jul	3,507	24,291	16,738	9,605	0	0	0	0	0	54,141
10-Jul	2,349	22,982	18,226	6,791	0	0	0	0	0	50,348
11-Jul	6,086	24,045	13,591	3,024	0	0	0	0	1,691	48,437
12-Jul	7,141	16,426	9,241	1,761	0	0	8,612	0	0	43,181
13-Jul	1,545	18,934	7,099	390	239	0	11,562	5,265	0	45,034
14-Jul	3,254	7,083	4,174	955	0	0	9,183	7,794	32,328	64,771
15-Jul	5,020	0	1,467	173	536	0	1,299	10,117	37,421	56,033
16-Jul	11,488	0	0	0	0	4,724	0	2,494	0	18,706
17-Jul	38,049	1,002	0	0	0	833	0	0	0	39,884
18-Jul	20,478	0	0	0	0	844	0	0	0	21,322

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Table 21. (page 2 of 3)

Date	Escapement	Chignik Lagoon	Hook Bay /Kuiulik	Aniakchak	Eastern District	Cape Igvak	Western District	Perryville District	Southeast Mainland	Daily Total
19-Jul	8,659	41,088	0	0	0	2,645	0	0	0	52,392
20-Jul	5,282	21,760	2,768	0	0	3,493	0	0	0	33,303
21-Jul	40,071	20,242	1,158	0	0	0	2,531	0	0	64,002
22-Jul	23,722	0	0	0	0	0	1,302	6,660	0	31,684
23-Jul	3,510	33,789	0	0	0	1,786	3,955	6,536	0	49,576
24-Jul	2,159	27,405	5,662	0	0	1,904	0	6,451	0	43,581
25-Jul	2,304	26,236	2,346	398	0	1,951	0	0	0	33,235
26-Jul	15,155	2,187	1,101	441	0	3,518	0	0	0	22,402
27-Jul	8,814	0	58	0	0	1,570	0	0	0	10,442
28-Jul	2,827	23,673	0	0	0	1,926	0	0	0	28,426
29-Jul	2,743	15,776	426	0	0	650	0	0	0	19,595
30-Jul	2,438	790	103	0	0	361	3,838	0	0	7,530
31-Jul	3,918	0	195	0	0	1	2,628	2,377	21,322	30,441
1-Aug	4,855	0	0	0	0	0	0	1,367	0	6,222
2-Aug	4,769	0	0	0	0	108	0	0	0	4,877
3-Aug	2,795	10,623	0	0	0	0	0	0	9,707	23,125
4-Aug	2,040	5,904	82	0	0	216	0	0	9,398	17,640
5-Aug	1,146	9,957	606	0	0	0	4,229	0	4,917	20,855
6-Aug	1,321	6,856	72	0	0	0	2,909	1,785	0	12,943
7-Aug	3,876	0	0	0	0	0	0	2,235	0	6,111
8-Aug	3,399	0	0	0	0	0	0	0	0	3,399
9-Aug	2,026	2,551	0	0	0	0	0	0	0	4,577
10-Aug	608	7,008	0	0	0	0	0	0	3,695	11,311
11-Aug	820	6,494	0	0	0	0	0	0	7,600	14,914
12-Aug	839	4,421	0	0	0	0	0	0	0	5,260
13-Aug	2,362	0	0	0	0	0	0	0	0	2,362
14-Aug	2,478	0	0	0	0	0	0	0	4,638	7,116
15-Aug	2,421	0	0	0	0	0	0	0	4,962	7,383
16-Aug	950	5,339	0	0	0	0	0	0	2,890	9,179
17-Aug	656	3,687	0	0	0	0	0	0	0	4,343
18-Aug	685	3,851	0	0	0	0	0	0	0	4,536
19-Aug	2,087	0	0	0	0	0	0	0	0	2,087
20-Aug	1,560	0	0	0	0	0	0	0	0	1,560
21-Aug	3,387	0	0	0	0	0	0	0	0	3,387
22-Aug	2,695	0	0	0	0	0	0	0	0	2,695
23-Aug	640	3,595	0	0	0	0	0	0	0	4,235
24-Aug	1,083	6,082	311	0	0	0	0	0	0	7,476
25-Aug	810	4,550	953	0	0	0	1,433	0	0	7,746
26-Aug	2,323	216	780	135	0	0	1,322	0	0	4,776
27-Aug	1,737	0	23	0	0	0	855	0	0	2,615
28-Aug	1,935	0	0	0	0	0	1,066	0	0	3,001
29-Aug	1,540	0	0	0	0	97	0	0	0	1,637
30-Aug	585	3,285	0	0	0	908	0	0	0	4,778
31-Aug	570	3,202	847	0	0	0	0	0	0	4,619
1-Sep	514	2,890	1,357	0	0	0	1,270	0	0	6,031
2-Sep	276	1,553	1,154	0	0	0	1,919	0	0	4,902
3-Sep	1,327	93	1,769	0	0	0	1,301	0	0	4,490
4-Sep	1,067	0	1	0	0	0	1,427	0	0	2,495
5-Sep	909	0	0	0	0	0	0	0	0	909
6-Sep	302	1,696	0	0	0	2,431	0	0	2,143	6,572
7-Sep	308	1,730	480	0	0	897	0	0	3,726	7,141

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Table 21. (page 3 of 3)

Date	Escapement	Chignik Lagoon	Hook Bay /Kujulik	Aniakchak	Eastern District	Cape Igvak	Western District	Perryville District	Southeast Mainland	Daily Total
8-Sep	273	1,532	782	0	0	2,265	777	0	0	5,629
9-Sep	783	0	389	0	18	471	640	0	0	2,301
10-Sep	586	0	0	0	0	0	267	0	1,900	2,753
11-Sep	395	0	0	0	0	0	0	0	3,027	3,422
12-Sep	314	0	0	0	0	0	0	0	1,659	1,973
13-Sep	134	754	0	0	0	0	0	0	1,684	2,572
14-Sep	83	469	0	0	0	204	0	0	385	1,141
15-Sep	86	485	0	0	0	0	0	0	0	571
16-Sep	271	0	0	0	0	0	0	0	0	271
17-Sep	385	0	0	0	0	0	0	0	30	415
18-Sep	452	0	0	0	0	0	0	0	0	452
19-Sep	147	827	0	0	0	0	0	0	0	974
20-Sep	32	0	0	0	0	0	0	0	161	193
21-Sep	10	58	0	0	0	0	0	0	0	68
22-Sep	27	0	0	0	0	0	0	0	0	27
23-Sep	20	0	0	0	0	0	0	0	0	20
26-Sep	0	0	0	0	0	0	0	0	218	218
28-Sep	0	0	0	0	0	0	0	0	149	149
Total	966,909	908,042	395,165	189,558	8,802	257,830	64,325	53,081	226,562	3,070,274

[a] Travel time to Chignik Lagoon from Cape Igvak and Southeastern District Mainland was assigned 5 days, Eastern and Perryville Districts was assigned 3 days, Western and Aniakchak was assigned 2 days, Hook Bay and Kujulik Bay was assigned 1 day, and Chignik weir escapement -1 day to apportion catch and escapement to Chignik Lagoon date.

Table 22. Daily and cumulative sockeye salmon catch and escapement as determined by scale pattern analysis (adjusted to Chignik Lagoon date) for the Black Lake stock, 1994.

Date	Escapement Counts	Catch	Daily Total	Cumulative Catch and Escapement	Cumulative Percent
30-May	140	0	140	140	0.0
31-May	119	0	119	259	0.0
1-Jun	194	0	194	453	0.0
2-Jun	316	0	316	769	0.0
3-Jun	129	0	129	898	0.0
4-Jun	84	0	84	982	0.0
5-Jun	94	0	94	1,076	0.0
6-Jun	1,059	0	1,059	2,135	0.1
7-Jun	1,301	0	1,301	3,436	0.1
8-Jun	1,335	0	1,335	4,771	0.2
9-Jun	5,372	0	5,372	10,143	0.4
10-Jun	10,857	0	10,857	21,000	0.9
11-Jun	9,043	0	9,043	30,043	1.3
12-Jun	12,541	869	13,410	43,453	1.8
13-Jun	18,010	0	18,010	61,463	2.6
14-Jun	19,742	1,037	20,779	82,242	3.5
15-Jun	14,915	0	14,915	97,157	4.1
16-Jun	26,911	864	27,775	124,932	5.3
17-Jun	27,519	0	27,519	152,451	6.4
18-Jun	18,019	2,084	20,103	172,554	7.3
19-Jun	75,384	0	75,384	247,938	10.5
20-Jun	66,778	1,957	68,735	316,673	13.4
21-Jun	71,928	18,813	90,741	407,414	17.2
22-Jun	78,072	0	78,072	485,486	20.5
23-Jun	72,015	0	72,015	557,501	23.6
24-Jun	39,873	0	39,873	597,374	25.3
25-Jun	2,572	105,530	108,102	705,476	29.8
26-Jun	6,333	88,485	94,818	800,294	33.8
27-Jun	1,797	65,914	67,711	868,005	36.7
28-Jun	1,952	46,252	48,204	916,209	38.7
29-Jun	715	117,694	118,409	1,034,618	43.8
30-Jun	556	91,120	91,676	1,126,294	47.6
1-Jul	1,099	93,351	94,450	1,220,744	51.6
2-Jul	978	98,158	99,136	1,319,880	55.8
3-Jul	1,869	87,873	89,742	1,409,622	59.6
4-Jul	1,383	48,887	50,270	1,459,892	61.7
5-Jul	2,428	59,684	62,112	1,522,004	64.4
6-Jul	2,872	53,159	56,031	1,578,035	66.7
7-Jul	2,804	63,001	65,805	1,643,840	69.5
8-Jul	1,731	58,097	59,828	1,703,668	72.0
9-Jul	3,217	46,457	49,674	1,753,342	74.1

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Table 22. (page 2 of 2)

Date	Escapement Counts	Catch	Daily Total	Cumulative Catch and Escapement	Cumulative Percent
10-Jul	2,122	43,367	45,489	1,798,831	76.1
11-Jul	5,358	37,283	42,641	1,841,472	77.9
12-Jul	6,121	30,889	37,010	1,878,482	79.4
13-Jul	1,288	36,257	37,545	1,916,027	81.0
14-Jul	2,724	51,487	54,211	1,970,238	83.3
15-Jul	4,223	42,909	47,132	2,017,370	85.3
16-Jul	9,722	6,108	15,830	2,033,200	86.0
17-Jul	32,432	1,564	33,996	2,067,196	87.4
18-Jul	17,110	705	17,815	2,085,011	88.2
19-Jul	7,096	35,839	42,935	2,127,946	90.0
20-Jul	4,248	22,536	26,784	2,154,730	91.1
21-Jul	31,649	18,901	50,550	2,205,280	93.3
22-Jul	18,413	6,180	24,593	2,229,873	94.3
23-Jul	2,679	35,166	37,845	2,267,718	95.9
24-Jul	1,622	31,124	32,746	2,300,464	97.3
25-Jul	1,579	21,206	22,785	2,323,249	98.2
26-Jul	9,408	4,499	13,907	2,337,156	98.8
27-Jul	4,911	907	5,818	2,342,974	99.1
28-Jul	1,399	12,665	14,064	2,357,038	99.7
29-Jul	902	5,543	6,445	2,363,483	99.9
30-Jul	400	835	1,235	2,364,718	100.0

Table 23. Daily and cumulative sockeye salmon catch and escapement as determined by scale pattern analysis (adjusted to Chignik Lagoon date) for the Chignik Lake stock, 1994.

Date	Escapement Counts	Catch	Daily Total	Cumulative Catch and Escapement	Cumulative Percent
30-May	9	0	9	9	0.0
31-May	9	0	9	18	0.0
1-Jun	17	0	17	35	0.0
2-Jun	32	0	32	67	0.0
3-Jun	14	0	14	81	0.0
4-Jun	10	0	10	91	0.0
5-Jun	13	0	13	104	0.0
6-Jun	154	0	154	258	0.0
7-Jun	204	0	204	462	0.1
8-Jun	226	0	226	688	0.1
9-Jun	977	0	977	1,665	0.2
10-Jun	2,114	0	2,114	3,779	0.5
11-Jun	1,879	0	1,879	5,658	0.8
12-Jun	2,773	192	2,965	8,623	1.2
13-Jun	5,185	0	5,185	13,808	2.0
14-Jun	7,074	372	7,446	21,254	3.0
15-Jun	4,082	0	4,082	25,336	3.6
16-Jun	5,258	169	5,427	30,763	4.4
17-Jun	4,919	0	4,919	35,682	5.1
18-Jun	2,834	328	3,162	38,844	5.5
19-Jun	8,061	0	8,061	46,905	6.6
20-Jun	4,263	125	4,388	51,293	7.3
21-Jun	5,465	1,429	6,894	58,187	8.2
22-Jun	6,917	0	6,917	65,104	9.2
23-Jun	7,326	0	7,326	72,430	10.3
24-Jun	4,601	0	4,601	77,031	10.9
25-Jun	334	13,680	14,014	91,045	12.9
26-Jun	915	12,784	13,699	104,744	14.8
27-Jun	266	9,739	10,005	114,749	16.3
28-Jun	298	7,065	7,363	122,112	17.3
29-Jun	115	18,766	18,881	140,993	20.0
30-Jun	94	15,430	15,524	156,517	22.2
1-Jul	197	16,716	16,913	173,430	24.6
2-Jul	184	18,516	18,700	192,130	27.2
3-Jul	266	12,484	12,750	204,880	29.0
4-Jul	140	4,948	5,088	209,968	29.8
5-Jul	159	3,893	4,052	214,020	30.3
6-Jul	177	3,269	3,446	217,466	30.8
7-Jul	163	3,651	3,814	221,280	31.4
8-Jul	128	4,278	4,406	225,686	32.0
9-Jul	290	4,177	4,467	230,153	32.6

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Table 23. (page 2 of 3)

Date	Escapement Counts	Catch	Daily Total	Cumulative Catch and Escapement	Cumulative Percent
10-Jul	227	4,632	4,859	235,012	33.3
11-Jul	728	5,068	5,796	240,808	34.1
12-Jul	1,020	5,151	6,171	246,979	35.0
13-Jul	257	7,232	7,489	254,468	36.1
14-Jul	530	10,030	10,560	265,028	37.6
15-Jul	797	8,104	8,901	273,929	38.8
16-Jul	1,766	1,110	2,876	276,805	39.2
17-Jul	5,617	271	5,888	282,693	40.1
18-Jul	3,368	139	3,507	286,200	40.6
19-Jul	1,563	7,894	9,457	295,657	41.9
20-Jul	1,034	5,485	6,519	302,176	42.8
21-Jul	8,422	5,030	13,452	315,628	44.7
22-Jul	5,309	1,782	7,091	322,719	45.7
23-Jul	831	10,900	11,731	334,450	47.4
24-Jul	537	10,298	10,835	345,285	48.9
25-Jul	725	9,725	10,450	355,735	50.4
26-Jul	5,747	2,748	8,495	364,230	51.6
27-Jul	3,903	721	4,624	368,854	52.3
28-Jul	1,428	12,934	14,362	383,216	54.3
29-Jul	1,841	11,309	13,150	396,366	56.2
30-Jul	2,038	4,257	6,295	402,661	57.1
31-Jul	3,918	26,523	30,441	433,102	61.4
1-Aug	4,855	1,367	6,222	439,324	62.3
2-Aug	4,769	108	4,877	444,201	63.0
3-Aug	2,795	20,330	23,125	467,326	66.2
4-Aug	2,040	15,600	17,640	484,966	68.7
5-Aug	1,146	19,709	20,855	505,821	71.7
6-Aug	1,321	11,622	12,943	518,764	73.5
7-Aug	3,876	2,235	6,111	524,875	74.4
8-Aug	3,399	0	3,399	528,274	74.9
9-Aug	2,026	2,551	4,577	532,851	75.5
10-Aug	608	10,703	11,311	544,162	77.1
11-Aug	820	14,094	14,914	559,076	79.2
12-Aug	839	4,421	5,260	564,336	80.0
13-Aug	2,362	0	2,362	566,698	80.3
14-Aug	2,478	4,638	7,116	573,814	81.3
15-Aug	2,421	4,962	7,383	581,197	82.4
16-Aug	950	8,229	9,179	590,376	83.7
17-Aug	656	3,687	4,343	594,719	84.3
18-Aug	685	3,851	4,536	599,255	84.9
19-Aug	2,087	0	2,087	601,342	85.2
20-Aug	1,560	0	1,560	602,902	85.5
21-Aug	3,387	0	3,387	606,289	85.9
22-Aug	2,695	0	2,695	608,984	86.3

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Table 23. (page 3 of 3)

Date	Escapement Counts	Catch	Daily Total	Cumulative Catch and Escapement	Cumulative Percent
23-Aug	640	3,595	4,235	613,219	86.9
24-Aug	1,083	6,393	7,476	620,695	88.0
25-Aug	810	6,936	7,746	628,441	89.1
26-Aug	2,323	2,453	4,776	633,217	89.7
27-Aug	1,737	878	2,615	635,832	90.1
28-Aug	1,935	1,066	3,001	638,833	90.5
29-Aug	1,540	97	1,637	640,470	90.8
30-Aug	585	4,193	4,778	645,248	91.5
31-Aug	570	4,049	4,619	649,867	92.1
1-Sep	514	5,517	6,031	655,898	93.0
2-Sep	276	4,626	4,902	660,800	93.7
3-Sep	1,327	3,163	4,490	665,290	94.3
4-Sep	1,067	1,428	2,495	667,785	94.6
5-Sep	909	0	909	668,694	94.8
6-Sep	302	6,270	6,572	675,266	95.7
7-Sep	308	6,833	7,141	682,407	96.7
8-Sep	273	5,356	5,629	688,036	97.5
9-Sep	783	1,518	2,301	690,337	97.8
10-Sep	586	2,167	2,753	693,090	98.2
11-Sep	395	3,027	3,422	696,512	98.7
12-Sep	314	1,659	1,973	698,485	99.0
13-Sep	134	2,438	2,572	701,057	99.4
14-Sep	83	1,058	1,141	702,198	99.5
15-Sep	86	485	571	702,769	99.6
16-Sep	271	0	271	703,040	99.6
17-Sep	385	30	415	703,455	99.7
18-Sep	452	0	452	703,907	99.8
19-Sep	147	827	974	704,881	99.9
20-Sep	32	161	193	705,074	99.9
21-Sep	10	58	68	705,142	99.9
22-Sep	27	0	27	705,169	99.9
23-Sep	20	0	20	705,189	99.9
26-Sep	0	218	218	705,407	100.0
28-Sep	0	149	149	705,556	100.0

Table 24. Black Lake weekly sockeye salmon escapement, by age class, estimated by postseason scale pattern analysis, 1994.

Statistical Week		Age class Composition													
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
May 24-May 30	Number	0	0	2	14	0	44	11	0	68	0	1	0	0	140
	Percent	0.0	0.0	1.4	10.0	0.0	31.4	7.9	0.0	48.6	0.0	0.7	0.0	0.0	
May 31-Jun 6	Number	0	4	27	199	0	628	161	0	961	0	15	0	0	1,995
	Percent	0.0	0.2	1.4	10.0	0.0	31.5	8.1	0.0	48.2	0.0	0.8	0.0	0.0	
Jun 7-Jun 13	Number	0	95	840	5,917	0	18,615	4,495	0	28,100	0	397	0	0	58,459
	Percent	0.0	0.2	1.4	10.1	0.0	31.8	7.7	0.0	48.1	0.0	0.7	0.0	0.0	
Jun 14-Jun 20	Number	0	112	3,260	24,185	0	93,156	20,117	796	107,059	0	470	112	0	249,267
	Percent	0.0	0.0	1.3	9.7	0.0	37.4	8.1	0.3	42.9	0.0	0.2	0.0	0.0	
Jun 21-Jun 27	Number	227	0	4,896	17,223	231	114,814	16,213	229	117,431	227	1,099	0	1	272,591
	Percent	0.1	0.0	1.8	6.3	0.1	42.1	5.9	0.1	43.0	0.1	0.4	0.0	0.0	
Jun 28-Jul 4	Number	1	0	174	617	27	3,974	372	23	3,336	1	19	0	9	8,553
	Percent	0.0	0.0	2.0	7.2	0.3	46.5	4.3	0.3	39.0	0.0	0.2	0.0	0.1	
Jul 5-Jul 11	Number	0	12	192	694	42	9,625	752	23	8,993	12	36	130	23	20,534
	Percent	0.0	0.1	0.9	3.4	0.2	46.9	3.7	0.1	43.8	0.1	0.2	0.6	0.1	
Jul 12-Jul 18	Number	0	0	320	1,805	164	30,164	8,134	251	29,276	5	241	3,249	9	73,618
	Percent	0.0	0.0	0.4	2.5	0.2	41.0	11.0	0.3	39.8	0.0	0.3	4.4	0.0	
Jul 19-Jul 25	Number	0	0	350	1,444	217	29,308	6,911	268	24,446	84	103	4,073	83	67,287
	Percent	0.0	0.0	0.5	2.1	0.3	43.6	10.3	0.4	36.3	0.1	0.2	6.1	0.1	
Jul 26-Jul 31	Number	0	0	37	253	25	7,980	1,738	47	4,611	35	25	2,256	13	17,020
	Percent	0.0	0.0	0.2	1.5	0.1	46.9	10.2	0.3	27.1	0.2	0.1	13.3	0.1	
	Total	228	223	10,098	52,351	706	308,308	58,904	1,637	324,281	364	2,406	9,820	138	769,464
	Percent	0.0	0.0	1.3	6.8	0.1	40.1	7.7	0.2	42.1	0.0	0.3	1.3	0.0	

Table 25. Chignik Lake weekly sockeye salmon escapement, by age class, estimated by postseason scale pattern analysis, 1994.

Statistical Week		Age class Composition													
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
May 24-May 30	Number	0	0	0	1	0	3	1	0	4	0	0	0	0	9
	Percent	0.0	0.0	0.0	11.1	0.0	33.3	11.1	0.0	44.4	0.0	0.0	0.0	0.0	
May 31-Jun 6	Number	0	0	3	25	0	78	20	0	121	0	2	0	0	249
	Percent	0.0	0.0	1.2	10.0	0.0	31.3	8.0	0.0	48.6	0.0	0.8	0.0	0.0	
Jun 7-Jun 13	Number	0	21	195	1,357	0	4,266	1,014	0	6,417	0	88	0	0	13,358
	Percent	0.0	0.2	1.5	10.2	0.0	31.9	7.6	0.0	48.0	0.0	0.7	0.0	0.0	
Jun 14-Jun 20	Number	0	23	514	4,084	0	13,039	2,920	130	15,708	0	51	23	0	36,492
	Percent	0.0	0.1	1.4	11.2	0.0	35.7	8.0	0.4	43.0	0.0	0.1	0.1	0.0	
Jun 21-Jun 27	Number	23	0	477	1,139	24	10,881	1,517	24	11,110	23	104	0	0	25,823
	Percent	0.1	0.0	1.9	6.4	0.1	42.2	5.8	0.1	43.0	0.1	0.4	0.0	0.0	
Jun 28-Jul 4	Number	0	0	27	95	4	602	57	3	501	0	3	0	1	1,293
	Percent	0.0	0.0	2.1	7.3	0.3	46.6	4.4	0.2	38.7	0.0	0.2	0.0	0.1	
Jul 5-Jul 11	Number	0	1	17	61	3	881	70	2	813	1	3	16	2	1,870
	Percent	0.0	0.1	0.9	3.3	0.2	47.1	3.7	0.1	43.5	0.1	0.2	0.9	0.1	
Jul 12-Jul 18	Number	0	0	58	327	30	5,473	1,477	46	5,308	1	44	591	2	13,357
	Percent	0.0	0.0	0.4	2.4	0.2	41.0	11.1	0.3	39.7	0.0	0.3	4.4	0.0	
Jul 19-Jul 25	Number	0	0	96	394	60	8,050	1,881	73	6,663	24	27	1,129	23	18,420
	Percent	0.0	0.0	0.5	2.1	0.3	43.7	10.2	0.4	36.2	0.1	0.1	6.1	0.1	
Jul 26-Aug 1	Number	0	0	24	304	28	10,775	3,035	68	5,998	72	101	3,305	20	23,730
	Percent	0.0	0.0	0.1	1.3	0.1	45.4	12.8	0.3	25.3	0.3	0.4	13.9	0.1	
Aug 2-Aug 8	Number	0	0	31	188	36	7,482	3,964	84	4,335	161	352	2,656	57	19,346
	Percent	0.0	0.0	0.2	1.0	0.2	38.7	20.5	0.4	22.4	0.8	1.8	13.7	0.3	

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Table 25. (page 2 of 2)

Statistical Week		Age class Composition 0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
Aug 9-Aug 15	Number	5	22	42	187	6	3,801	3,012	63	1,736	127	286	2,225	42	11,554
	Percent	0.0	0.2	0.4	1.6	0.1	32.9	26.1	0.5	15.0	1.1	2.5	19.3	0.4	
Aug 16-Aug 22	Number	4	8	70	240	19	2,815	3,745	29	1,508	215	301	3,015	51	12,020
	Percent	0.0	0.1	0.6	2.0	0.2	23.4	31.2	0.2	12.5	1.8	2.5	25.1	0.4	
Aug 23-Aug 29	Number	0	0	60	219	20	2,167	3,283	20	1,194	199	259	2,607	40	10,068
	Percent	0.0	0.0	0.6	2.2	0.2	21.5	32.6	0.2	11.9	2.0	2.6	25.9	0.4	
Aug 30-Sep 5	Number	0	0	31	114	10	1,131	1,711	10	622	104	135	1,359	21	5,248
	Percent	0.0	0.0	0.6	2.2	0.2	21.6	32.6	0.2	11.9	2.0	2.6	25.9	0.4	
Sep 6-Sep 12	Number	0	0	18	64	6	636	966	6	351	59	76	767	12	2,961
	Percent	0.0	0.0	0.6	2.2	0.2	21.5	32.6	0.2	11.9	2.0	2.6	25.9	0.4	
Sep 13-Sep 19	Number	0	0	9	34	3	336	508	3	185	31	40	403	6	1,558
	Percent	0	0	0.6	2.2	0.2	21.6	32.6	0.2	11.9	2	2.6	25.9	0.4	
Sep 20-Sep 29	Number	0	0	1	2	0	19	29	0	11	2	2	23	0	89
	Percent	0.0	0.0	1.1	2.2	0.0	21.3	32.6	0.0	12.4	2.2	2.2	25.8	0.0	
	Total	32	75	1,673	9,335	249	72,436	29,210	561	62,585	1,019	1,874	18,119	277	197,445
	Percent	0.0	0.0	0.8	4.7	0.1	36.7	14.8	0.3	31.7	0.5	0.9	9.2	0.1	

Table 26. Black Lake weekly sockeye salmon catch, by age class, estimated by postseason scale pattern analysis, 1994.

Statistical Week		Age class Composition													
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
Jun 7-Jun 13	Number	0	2	12	87	0	274	70	0	417	0	7	0	0	869
	Percent	0.0	0.2	1.4	10.0	0.0	31.5	8.1	0.0	48.0	0.0	0.8	0.0	0.0	
Jun 14-Jun 20	Number	0	2	81	576	0	2,185	483	20	2,583	0	10	2	0	5,942
	Percent	0.0	0.0	1.4	9.7	0.0	36.8	8.1	0.3	43.5	0.0	0.2	0.0	0.0	
Jun 21-Jun 27	Number	460	0	6,740	19,075	596	119,166	13,561	551	117,035	460	1,053	0	45	278,742
	Percent	0.2	0.0	2.4	6.8	0.2	42.8	4.9	0.2	42.0	0.2	0.4	0.0	0.0	
Jun 28-Jul 4	Number	32	0	11,838	43,855	1,886	273,759	25,204	1,654	223,256	32	1,201	0	618	583,335
	Percent	0.0	0.0	2.0	7.5	0.3	46.9	4.3	0.3	38.3	0.0	0.2	0.0	0.1	
Jul 5-Jul 11	Number	0	275	3,473	12,504	830	168,384	12,771	468	159,461	275	744	1,471	392	361,048
	Percent	0.0	0.1	1.0	3.5	0.2	46.6	3.5	0.1	44.2	0.1	0.2	0.4	0.1	
Jul 12-Jul 18	Number	0	0	930	5,079	529	76,728	13,080	382	67,351	0	382	5,438	20	169,919
	Percent	0.0l	0.0l	0.5l	3.0l	0.3l	45.2l	7.7l	0.2l	39.6l	0.0l	0.2l	3.2l	0.0l	
Jul 19-Jul 25	Number	0	0	898	3,598	565	75,538	17,129	677	60,785	242	214	11,074	232	170,952
	Percent	0.0	0.0	0.5	2.1	0.3	44.2	10.0	0.4	35.6	0.1	0.1	6.5	0.1	
Jul 26-Jul 31	Number	0	0	15	310	13	11,467	2,680	56	5,985	53	55	3,808	7	24,449
	Percent	0.0	0.0	0.1	1.3	0.1	46.9	11.0	0.2	24.5	0.2	0.2	15.6	0.0	
	Total	492	279	23,987	85,084	4,419	727,501	84,978	3,808	636,873	1,062	3,666	21,793	1,314	1,595,256
	Percent	0.0	0.0	1.5	5.3	0.3	45.6	5.3	0.2	39.9	0.1	0.2	1.4	0.1	

Table 27. Chignik Lake weekly sockeye salmon catch, by age class, estimated by postseason scale pattern analysis, 1994.

Statistical Week		Age class Composition													
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
Jun 7-Jun 13	Number	0	0	3	19	0	60	15	0	94	0	1	0	0	192
	Percent	0	0	1.6	9.9	0	31.3	7.8	0	49	0	0.5	0	0	
Jun 14-Jun 20	Number	0	0	15	108	0	349	78	3	440	0	1	0	0	994
	Percent	0	0	1.5	10.9	0	35.1	7.8	0.3	44.3	0	0.1	0	0	
Jun 21-Jun 27	Number	64	0	922	2,589	84	16,107	1,806	77	15,771	64	141	0	7	37,632
	Percent	0.2	0	2.5	6.9	0.2	42.8	4.8	0.2	41.9	0.2	0.4	0	0	
Jun 28-Jul 4	Number	5	0	1,929	7,121	293	44,151	4,087	268	35,774	5	196	0	96	93,925
	Percent	0	0	2.1	7.6	0.3	47	4.4	0.3	38.1	0	0.2	0	0.1	
Jul 5-Jul 11	Number	0	18	274	978	57	13,578	1,035	32	12,730	18	51	163	34	28,968
	Percent	0	0.1	0.9	3.4	0.2	46.9	3.6	0.1	43.9	0.1	0.2	0.6	0.1	
Jul 12-Jul 18	Number	0	0	174	958	101	14,461	2,476	73	12,689	0	72	1,030	3	32,037
	Percent	0	0	0.5	3	0.3	45.1	7.7	0.2	39.6	0	0.2	3.2	0	
Jul 19-Jul 25	Number	0	0	270	1,062	172	22,807	5,033	201	17,907	78	54	3,456	74	51,114
	Percent	0	0	0.5	2.1	0.3	44.6	9.8	0.4	35	0.2	0.1	6.8	0.1	
Jul 26-Aug 1	Number	0	0	10	691	41	27,132	7,978	157	14,273	188	289	9,062	38	59,859
	Percent	0	0	0	1.2	0.1	45.3	13.3	0.3	23.8	0.3	0.5	15.1	0.1	
Aug 2-Aug 8	Number	0	0	76	678	136	27,219	14,299	297	15,983	534	1,143	9,053	186	69,604
	Percent	0	0	0.1	1	0.2	39.1	20.5	0.4	23	0.8	1.6	13	0.3	
Aug 9-Aug 15	Number	8	51	166	601	37	13,689	10,508	228	6,590	501	1,152	7,671	167	41,369
	Percent	0	0.1	0.4	1.5	0.1	33.1	25.4	0.6	15.9	1.2	2.8	18.5	0.4	
Aug 16-Aug 22	Number	25	57	82	200	0	4,962	3,957	70	2,421	159	350	3,402	82	15,767
	Percent	0.2	0.4	0.5	1.3	0	31.5	25.1	0.4	15.4	1	2.2	21.6	0.5	

-Continued-

Table 27. . (page 2 of 2)

Statistical Week		Age class Composition													
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
Aug 23-Aug 29	Number	0	0	127	466	42	4,614	6,984	42	2,540	423	550	5,545	85	21,418
	Percent	0	0	0.6	2.2	0.2	21.5	32.6	0.2	11.9	2	2.6	25.9	0.4	
Aug 30-Sep 5	Number	0	0	136	499	45	4,952	7,492	45	2,724	454	590	5,948	91	22,976
	Percent	0	0	0.6	2.2	0.2	21.6	32.6	0.2	11.9	2	2.6	25.9	0.4	
Sep 6-Sep 12	Number	0	0	159	583	53	5,781	8,749	53	3,181	530	689	6,946	106	26,830
	Percent	0	0	0.6	2.2	0.2	21.5	32.6	0.2	11.9	2	2.6	25.9	0.4	
Sep 13-Sep 19	Number	0	0	29	105	10	1,040	1,578	10	574	96	124	1,253	19	4,838
	Percent	0	0	0.6	2.2	0.2	21.5	32.6	0.2	11.9	2	2.6	25.9	0.4	
Sep 20-Sep 26	Number	0	0	3	10	1	92	143	1	52	9	11	113	2	437
	Percent	0	0	0.7	2.3	0.2	21.1	32.7	0.2	11.9	2.1	2.5	25.9	0.5	
Sep 27-Oct 3	Number	0	0	1	3	0	31	49	0	18	3	4	39	1	149
	Percent	0	0	0.7	2	0	20.8	32.9	0	12.1	2	2.7	26.2	0.7	
	Total	102	126	4,376	16,671	1,072	201,025	76,267	1,557	143,761	3,062	5,418	53,681	991	508,109
	Percent	0	0	0.9	3.3	0.2	39.6	15	0.3	28.3	0.6	1.1	10.6	0.2	

Table 28. Black Lake and Chignik Lake sockeye salmon run estimates by age class for total escapement and catch, based on scale pattern analysis, 1994.

	Age Class													
	0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
Black Lake														
Escapement	228	223	10,098	52,351	706	308,308	58,904	1,637	324,281	364	2,406	9,820	138	769,464
Catch	492	279	23,987	85,084	4,419	727,501	84,978	3,808	636,873	1,062	3,666	21,793	1,314	1,595,256
Run	720	502	34,085	137,435	5,125	1,035,809	143,882	5,445	961,154	1,426	6,072	31,613	1,452	2,364,720
Percent	0.0	0.0	1.4	5.8	0.2	43.8	6.1	0.2	40.6	0.1	0.3	1.3	0.1	
Chignik Lake														
Escapement	32	75	1,673	9,335	249	72,436	29,210	561	62,585	1,019	1,874	18,119	277	197,445
Catch	102	126	4,376	16,671	1,072	201,025	76,267	1,557	143,761	3,062	5,418	53,681	991	508,109
Run	134	201	6,049	26,006	1,321	273,461	105,477	2,118	206,346	4,081	7,292	71,800	1,268	705,554
Percent	0.0	0.0	0.9	3.7	0.2	38.8	14.9	0.3	29.2	0.6	1.0	10.2	0.2	
Total Run														
Escapement	260	298	11,771	61,686	955	380,744	88,114	2,198	386,866	1,383	4,280	27,939	415	966,909
Catch	594	405	28,363	101,755	5,491	928,526	161,245	5,365	780,634	4,124	9,084	75,474	2,305	2,103,365
Run	854	703	40,134	163,441	6,446	1,309,270	249,359	7,563	1,167,500	5,507	13,364	103,413	2,720	3,070,274
Percent	0.0	0.0	1.3	5.3	0.2	42.6	8.1	0.2	38.0	0.2	0.4	3.4	0.1	

Table 29. Catch and escapement for the Chignik Lake systems's sockeye salmon for Black Lake, Chignik Lake, and combined runs based on postseason scale pattern analysis, 1954-1994.

	Black Lake			Chignik Lake			Combined		
Year	Catch	Escapement	Total	Catch	Escapement	Total	Catch	Escapement	Total
1954	72,334	184,953	257,287	19,232	277,912	297,144	91,566	462,865	554,431
1955	179,539	256,757	436,296	168,987	201,409	370,396	348,526	458,166	806,692
1956	246,442	289,096	535,538	421,251	483,024	904,275	667,693	772,120	1,439,813
1957	77,423	192,479	269,902	224,757	328,779	553,536	302,180	521,258	823,438
1958	141,180	120,862	262,042	179,949	212,594	392,543	321,129	333,456	654,585
1959	165,000	112,226	277,226	251,547	308,645	560,192	416,547	420,871	837,418
1960	274,048	251,567	525,615	418,356	357,230	775,586	692,404	608,797	1,301,201
1961	53,852	140,714	194,566	278,609	254,970	533,579	332,461	395,684	728,145
1962	71,562	167,602	239,164	292,528	324,860	617,388	364,090	492,462	856,552
1963	80,258	332,536	412,794	323,080	200,314	523,394	403,338	532,850	936,188
1964	142,380	137,073	279,453	472,510	166,625	639,135	614,890	303,698	918,588
1965	497,018	307,192	804,210	169,576	163,151	332,727	666,594	470,343	1,136,937
1966	87,169	383,545	470,714	162,638	183,525	346,163	249,807	567,070	816,877
1967	154,134	328,000	482,134	350,901	189,000	539,901	505,035	517,000	1,022,035
1968	542,598	342,343	884,941	641,693	244,836	886,529	1,184,291	587,179	1,771,470
1969	263,170	366,589	629,759	235,960	132,055	368,015	499,130	498,644	997,774
1970	1,566,065	536,257	2,102,322	262,244	119,952	382,196	1,828,309	656,209	2,484,518
1971	555,832	671,668	1,227,500	709,190	232,501	941,691	1,265,022	904,169	2,169,191
1972	43,220	326,320	369,540	386,615	231,270	617,885	429,835	557,590	987,425
1973	569,854	533,047	1,102,901	396,114	247,144	643,258	965,968	780,191	1,746,159
1974	174,883	351,701	526,584	675,607	364,612	1,040,219	850,490	716,313	1,566,803
1975	4,019	308,914	312,933	421,414	314,084	735,498	425,433	622,998	1,048,431
1976	548,107	551,254	1,099,361	778,380	341,828	1,120,208	1,326,487	893,082	2,219,569
1977	439,693	482,247	921,940	1,696,767	463,561	2,160,328	2,136,460	945,808	3,082,268
1978	1,070,487	458,660	1,529,147	754,838	263,009	1,017,847	1,825,325	721,669	2,546,994
1979	207,122	385,694	592,816	944,964	317,889	1,262,853	1,152,086	703,583	1,855,669
1980	170,629	311,332	481,961	778,014	279,729	1,057,743	948,643	591,061	1,539,704
1981	779,755	438,540	1,218,295	1,509,959	301,092	1,811,051	2,289,714	739,632	3,029,346
1982	1,325,041	616,117	1,941,158	451,789	305,193	756,982	1,776,830	921,310	2,698,140
1983	977,548	426,177	1,403,725	1,467,060	441,561	1,908,621	2,444,608	867,738	3,312,346
1984	3,245,482	597,712	3,843,194	353,141	268,496	621,637	3,598,623	866,208	4,464,831
1985	650,340	377,516	1,027,856	490,151	369,262	859,413	1,140,491	746,778	1,887,269
1986	1,371,935	566,088	1,938,023	609,084	207,231	816,315	1,981,019	773,319	2,754,338
1987	1,949,867	589,291	2,539,158	482,311	214,452	696,763	2,432,178	803,743	3,235,921
1988	272,553	420,577	693,131	631,172	255,180	886,352	903,725	675,757	1,579,482
1989	234,839	384,004	618,843	1,063,042	557,171	1,620,213	1,297,881	941,175	2,239,056
1990	587,818	434,543	1,022,361	1,856,597	335,867	2,192,464	2,444,415	770,410	3,214,825
1991	1,714,835	657,511	2,372,346	751,291	382,587	1,133,878	2,466,126	1,040,098	3,506,224
1992	747,829	360,681	1,108,510	863,651	405,922	1,269,573	1,611,480	766,603	2,378,083
1993	926,863	364,263	1,291,126	1,322,984	333,114	1,656,098	2,249,847	697,377	2,947,224
1994	1,595,256	769,464	2,364,720	508,109	197,445	705,554	2,103,365	966,909	3,070,274
Average									
85-94	1,005,214	492,394	1,497,607	857,839	325,823	1,183,662	1,863,053	818,217	2,681,270
75-84	876,788	457,665	1,334,453	915,633	329,644	1,245,277	1,792,421	787,309	2,579,730
65-74	445,394	414,666	860,061	399,054	210,805	609,858	844,448	625,471	1,469,919

[a] Includes the entire catch from Igvak and Southeast Mainland.

Table 30. Black Lake and Black River tributaries peak aerial sockeye salmon survey escapement estimates, 1960-1994.[a]

	Black Lake							Black River				Chignik Lake		
Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate	Broad Creek	Total	Bearskin Creek	West Fork	Chiaktuak Creek	Total	Clark River	Home Creek	Hatchery Beach
1960	38,500	8,000	40,000	30,000	3,000	30,000	149,500	11,600	23,000	19,000	53,600			
1961	27,000	5,000	28,700	25,000	800	17,000	103,500	2,500	17,100	20,700	40,300			
1962	18,000	7,000	13,000	60,000	200	15,000	113,200	3,000	13,000	24,000	40,000			
1963	39,000	-	36,000	85,000	1,000	61,000	222,000	900	5,000	9,000	14,900			
1964	19,500	3,050	23,850	17,900	9,300	9,500	83,100	500	4,500	7,000	12,000			
1967	20,000	1,000	9,000	156,000	10,000	10,000	206,000	10,000	25,000	31,000	66,000			
1968	32,000	2,400	20,000	60,000	2,000	4,100	120,500	1,200	10,500	10,000	21,700			
1969	103,000	2,100	33,000	50,000	4,000	5,000	197,100	50	800	1,500	2,350			
1970	146,000	9,000	55,500	198,000	5,000	-	413,500	450	4,000	4,000	8,450			
1971	105,000	14,000	85,000	158,000	0	-	362,000	3,500	5,500	47,000	56,000			
1972	18,000	3,500	19,000	74,000	400	-	114,900	1,400	4,300	23,000	28,700			
1973	115,000	4,000	76,000	74,000	5,000	-	274,000	13	4,100	1,500	5,613			
1974	90,000	5,000	50,000	93,000	5,000	-	243,000	450	8,000	7,000	15,450			
1975	40,000	4,500	25,000	87,000	0	-	156,500	65	2,500	2,500	5,065			
1976	78,000	8,900	100,000	119,000	2,000	-	307,900	2,650	23,700	7,700	34,050			
1977	88,000	20,000	127,000	133,000	1,000	-	369,000	200	13,600	6,900	20,700			
1978	114,000	3,300	74,000	83,300	500	-	275,100	410	9,600	8,500	18,510			
1979	37,000	11,800	32,000	105,100	400	26,100	212,400	918	7,610	29,000	37,528			
1980	127,000	16,000	75,000	70,500	1,500	68,000	358,000	3,600	33,000	40,400	77,000			
1981	93,000	4,700	59,000	76,500	20,000	27,000	280,200	950	1,500	18,700	21,150			
1982	50,000	5,500	60,000	43,000	20,000	32,000	210,500	1,066	10,791	5,000	16,857			
1983	-	-	-	-	-	-	-	-	-	6,000	6,000			
1984	50,000	22,200	70,000	30,500	31,000	36,000	239,700	-	-	-	8,200			
1985	28,000	5,500	36,000	65,000	5,500	17,000	157,000	350	450	1,200	2,000			
1986	60,000	15,300	47,000	76,000	39,000	27,000	264,300	-	-	8,300	8,300			
1987	52,000	12,200	133,000	88,400	45,900	32,500	364,000	-	-	1,000	1,000			
1988	54,000	71,000	83,700	106,500	2,300	26,500	344,000	-	-	4,600	4,600			
1989	19,300	21,000	64,000	133,000	1,000	7,500	245,800	-	-	2,100	2,100			
1990	32,600	7,400	35,900	49,800	2,200	18,000	145,900	300	0	50	350			
1991	14,600	19,500	48,000	-	2,000	13,000	97,100	-	-	-	-			
1992[b]	-	-	-	392,000	-	-	-	-	-	-	-			
1993	40,900	12,600	97,600	8,000	77,000	18,200	254,300	-	-	16,000	16,000			
1994	70,000	25,000	125,000	350,000	20,000	51,000	641,000	5,000	-	31,000	36,000	18,000	9,200	-

[a] Dashes or blanks represent no surveys taken or survey results not adequate to make stream estimate.

[b] Survey considered incomplete for all streams except the Alec River.

Table 31. Pink salmon catch, escapement, and run numbers (in thousands of fish) in the Chignik Bay District, 1962-1994.[a,b]

Year	Catch	Escapement[c]	Run	Year	Catch	Escapement	Run
1962	36.7	30.0	66.7	1979	312.4	1.2	313.6
1963	63.7	20.7	84.4	1980	180.9	3.0	183.9
1964	123.6	20.0	143.6	1981	121.4	1.4	122.8
1965	31.5	11.0	42.5	1982	83.0	2.4	85.4
1966	18.3	71.3	89.6	1983	27.3	1.0	28.3
1967	27.4	5.7	33.1	1984	165.2	123.2	288.4
1968	230.2	81.4	311.6	1985	14.4	0.0	14.4
1969	29.5	11.7	41.2	1986	191.3	0.0	191.3
1970	46.3	43.6	89.9	1987	13.9	0.0	13.9
1971	65.3	5.5	70.8	1988	119.8	22.4	142.2
1972	31.6	5.8	37.4	1989	27.7	13.5	41.2
1973	22.7	2.2	24.9	1990	94.5	6.0	100.5
1974	33.5	4.0	37.5	1991	76.2	12.2	88.4
1975	27.4	1.2	28.6	1992	178.2	55.8	234.0
1976	108.8	12.3	121.1	1993	55.9	2.0	57.9
1977	60.9	3.0	63.9	1994	59.4	75.8	135.2
1978	137.1	10.7	147.8				

[c] Chignik River escapement was incompletely monitored because the weir was removed August 14.

Table 32. Pink salmon catch, escapement, and run numbers (in thousands of fish) in the Central District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	84.3	83.9	168.2	1979	284.4	297.0	581.4
1963	121.3	92.6	213.9	1980	108.7	99.4	208.1
1964	71.9	131.1	203.0	1981	210.0	76.5	286.5
1965	69.5	65.8	135.3	1982	80.6	26.1	106.7
1966	17.4	62.6	80.0	1983	7.9	11.0	18.9
1967	26.0	18.5	44.5	1984	47.3	94.0	141.3
1968	45.4	66.1	111.5	1985	16.1	7.4	23.5
1969	1.4	69.6	71.0	1986	44.1	121.9	166.0
1970	27.9	60.7	88.6	1987	7.8	65.7	73.5
1971	20.5	74.8	95.3	1988	318.4	216.4	534.8
1972	0.8	3.1	3.9	1989	0.0	215.0	215.0
1973	0.3	50.2	50.5	1990	233.7	131.9	365.6
1974	22.1	9.8	31.9	1991	174.0	201.1	375.1
1975	31.3	26.4	57.7	1992	205.7	223.8	429.5
1976	16.6	66.0	82.6	1993	198.5	160.9	359.4
1977	120.0	199.9	319.9	1994	99.1	178.9	278.0
1978	61.2	101.2	162.4				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett 1988). September 15 was the assumed last day of stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 33. Pink salmon catch, escapement, and run numbers (in thousands of fish) in the Eastern District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	1109.9	401.7	1511.6	1979	292.4	194.3	486.7
1963	26.9	126.2	153.1	1980	472.5	425.5	898.0
1964	1251.5	605.7	1857.2	1981	173.3	154.7	328.0
1965	25.7	64.8	90.5	1982	89.1	301.5	390.6
1966	386.2	302.2	688.4	1983	7.8	46.3	54.1
1967	22.6	56.1	78.7	1984	57.7	486.5	544.2
1968	523.4	390.3	913.7	1985	6.6	212.1	218.7
1969	1.7	46.0	47.7	1986	49.6	580.7	630.3
1970	268.9	201.7	470.6	1987	2.1	215.6	217.7
1971	29.0	23.0	52.0	1988	1006.4	1005.4	2011.8
1972	12.9	15.9	28.8	1989	0.0	881.0	881.0
1973	2.5	12.8	15.3	1990	40.6	811.4	852.0
1974	0.6	76.2	76.8	1991	28.0	125.0	153.0
1975	0.0	23.5	23.5	1992	183.1	1318.1	1501.2
1976	28.8	228.8	257.6	1993	59.3	524.7	584.0
1977	0.2	76.0	76.2	1994	13.0	863.3	876.3
1978	86.8	309.3	396.1				

Table 34. Pink salmon catch, escapement, and run numbers (in thousands of fish) in the Western District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	81.0	242.0	323.0	1979	744.6	185.0	929.6
1963	516.9	305.0	821.9	1980	216.5	139.5	356.0
1964	112.9	165.0	277.9	1981	433.6	249.3	682.9
1965	345.6	152.0	497.6	1982	602.4	45.9	648.3
1966	173.2	179.3	352.5	1983	164.3	36.0	200.3
1967	27.1	104.4	131.5	1984	173.8	188.0	361.8
1968	295.6	151.3	446.9	1985	80.6	67.5	148.1
1969	485.0	422.0	907.0	1986	200.8	43.8	244.6
1970	442.7	202.0	644.7	1987	187.7	38.3	226.0
1971	285.4	268.8	554.2	1988	1141.4	232.4	1373.8
1972	14.9	8.6	23.5	1989	0.0	57.9	57.9
1973	0.0	62.4	62.4	1990	135.8	44.3	180.1
1974	13.4	77.4	90.8	1991	419.3	96.8	516.1
1975	7.4	141.7	149.1	1992	628.9	38.8	667.7
1976	135.8	114.2	250.0	1993	685.6	45.8	731.4
1977	379.0	355.5	734.5	1994	174.6	111.6	286.2
1978	419.3	333.4	752.7				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was assumed to last day of stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 35. Pink salmon catch, escapement, and run numbers (in thousands of fish) in the Perryville District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	207.4	155.5	362.9	1979	271.4	181.3	452.7
1963	933.6	162.0	1095.6	1980	114.6	74.8	189.4
1964	122.6	72.0	194.6	1981	224.3	116.0	340.3
1965	644.8	82.0	726.8	1982	18.3	13.4	31.7
1966	88.2	90.0	178.2	1983	113.9	64.5	178.4
1967	5.2	155.3	160.5	1984	0.8	109.8	110.6
1968	196.1	128.7	324.8	1985	42.5	235.2	277.7
1969	1262.2	218.6	1480.8	1986	161.3	180.5	341.8
1970	371.4	72.6	444.0	1987	35.3	65.7	101.0
1971	212.1	45.0	257.1	1988	411.2	181.3	592.5
1972	12.0	7.8	19.8	1989	0.0	267.4	267.4
1973	0.0	31.5	31.5	1990	45.4	88.4	133.8
1974	0.0	60.2	60.2	1991	471.9	343.5	815.4
1975	0.0	45.3	45.3	1992	358.2	190.4	548.6
1976	105.2	89.3	194.5	1993	649.1	448.4	1097.5
1977	44.6	115.4	160.0	1994	84.9	153.9	238.8
1978	280.8	157.5	438.3				

Table 36. Total pink salmon catch, escapement, and run numbers (in thousands of fish) in the Chignik Management Area, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	1519.3	913.1	2432.4	1979	1905.2	858.8	2764
1963	1662.4	706.5	2368.9	1980	1093.2	742.2	1835.4
1964	1682.5	993.8	2676.3	1981	1162.6	597.9	1760.5
1965	1117.1	375.6	1492.7	1982	873.4	389.3	1262.7
1966	683.3	705.4	1388.7	1983	321.2	158.8	480.0
1967	108.3	340.0	448.3	1984	444.8	1001.5	1446.3
1968	1290.7	817.8	2108.5	1985	160.1	522.2	682.3
1969	1779.8	767.9	2547.7	1986	647.1	926.9	1574.0
1970	1157.2	580.6	1737.8	1987	246.8	385.3	632.1
1971	612.3	417.1	1029.4	1988	2997.2	1657.9	4655.1
1972	72.2	41.2	113.4	1989	27.7	1434.8	1462.5
1973	25.5	159.1	184.6	1990	550.0	1082.0	1632.0
1974	69.6	227.6	297.2	1991	1169.2	778.6	1947.8
1975	66.2	238.1	304.3	1992	1554.1	1826.9	3381.0
1976	395.3	510.6	905.9	1993	1648.4	1181.8	2830.2
1977	604.8	749.8	1354.6	1994	431.1	1383.5	1814.6
1978	985.1	912.1	1897.3				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was the assumed last day of stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 37. Chum salmon catch, escapement, and run numbers (in thousands of fish) in the Chignik Bay District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	5.2	6.7	11.9	1979	32.2	1.6	33.8
1963	5.3	0.8	6.1	1980	19.9	0.3	20.2
1964	8.5	2.5	11.0	1981	38.1	0.5	38.6
1965	1.2	3.0	4.2	1982	16.0	1.4	17.4
1966	6.6	4.5	11.1	1983	16.7	0.1	16.8
1967	5.9	4.0	9.9	1984	8.2	0.3	8.5
1968	5.4	1.0	6.4	1985	4.9	0.0	4.9
1969	2.9	1.5	4.4	1986	18.2	0.0	18.2
1970	1.7	21.0	22.7	1987	5.2	0.1	5.3
1971	19.4	7.1	26.5	1988	7.0	15.3	22.3
1972	18.2	3.3	21.5	1989	1.6	4.2	5.8
1973	7.3	0.7	8.0	1990	11.5	1.5	13.0
1974	17.3	2.1	19.4	1991	17.5	0.0	17.5
1975	21.2	2.1	23.3	1992	12.7	0.1	12.8
1976	19.2	2.4	21.6	1993	8.1	0.3	8.4
1977	8.6	2.0	10.6	1994	25.3	1.5	26.8
1978	15.0	2.1	17.1				

Table 38. Chum salmon catch, escapement, and run numbers (in thousands of fish) in the Central District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	132.0	40.4	172.4	1979	11.4	44.8	56.2
1963	23.1	34.0	57.1	1980	38.9	34.2	73.1
1964	50.3	24.2	74.5	1981	160.7	26.1	186.8
1965	37.8	19.2	57.0	1982	33.7	49.4	83.1
1966	20.9	10.0	30.9	1983	9.8	17.0	26.8
1967	9.9	17.2	27.1	1984	8.2	35.4	43.6
1968	4.2	14.5	18.7	1985	5.2	9.6	14.8
1969	3.2	6.5	9.7	1986	29.5	31.0	60.5
1970	28.6	23.4	52.0	1987	9.4	17.5	26.9
1971	13.7	29.1	42.9	1988	39.3	55.8	95.1
1972	1.6	14.2	15.8	1989	0.0	34.7	34.7
1973	0.2	12.2	14.4	1990	113.7	28.0	141.7
1974	13.5	18.1	31.6	1991	51.4	18.0	69.4
1975	3.2	18.8	22.0	1992	45.5	173.1	218.6
1976	3.4	17.8	21.2	1993	43.0	39.4	82.4
1977	8.9	9.3	18.2	1994	69.6	102.6	172.2
1978	10.3	13.8	24.1				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was assumed to be the last day for stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 39. Chum salmon catch, escapement, and run numbers (in thousands of fish) in the Eastern District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	74.7	79.6	154.3	1979	36.1	79.5	115.6
1963	20.5	55.2	75.7	1980	56.8	107.0	163.8
1964	242.7	165.4	408.1	1981	108.7	126.0	234.7
1965	32.4	58.0	90.4	1982	64.5	145.4	209.9
1966	130.1	58.0	188.1	1983	8.3	50.2	58.5
1967	24.4	89.8	114.2	1984	21.1	214.7	235.8
1968	110.1	63.0	173.1	1985	0.9	4.9	5.8
1969	3.7	66.5	70.2	1986	17.9	8.5	26.4
1970	241.1	126.0	367.1	1987	8.9	38.3	47.2
1971	102.3	219.2	321.5	1988	77.5	221.9	299.4
1972	27.7	107.4	135.1	1989	0.0	74.3	74.3
1973	1.2	59.1	60.3	1990	27.5	139.7	167.2
1974	0.3	76.3	76.5	1991	4.9	70.4	75.3
1975	0.0	41.3	41.3	1992	61.2	306.9	368.1
1976	10.0	122.3	132.3	1993	21.4	135.2	156.6
1977	1.5	54.5	56.0	1994	4.3	129.2	133.5
1978	17.5	55.8	73.3				

Table 40. Chum salmon catch, escapement, and run numbers (in thousands of fish) in the Western District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	134.4	83.1	217.5	1979	82.3	42.5	124.8
1963	44.7	10.0	54.7	1980	91.9	56.5	148.4
1964	21.2	37.0	58.2	1981	221.6	70.3	291.9
1965	36.4	25.0	61.4	1982	253.3	35.4	288.7
1966	73.8	12.0	85.8	1983	102.0	20.1	122.1
1967	33.6	24.0	57.6	1984	25.4	73.8	99.2
1968	90.1	9.6	99.7	1985	10.7	34.6	45.3
1969	36.8	27.6	64.4	1986	74.1	5.3	79.4
1970	139.6	49.7	189.3	1987	86.9	19.7	106.6
1971	177.5	184.1	361.6	1988	102.7	27.4	130.1
1972	18.5	59.0	77.5	1989	0.0	7.4	7.4
1973	0.0	35.6	35.6	1990	91.6	28.8	120.4
1974	3.2	39.4	42.6	1991	98.6	38.1	136.7
1975	0.8	43.4	44.2	1992	65.5	53.3	118.8
1976	33.1	55.0	88.1	1993	25.0	14.0	39.0
1977	88.0	70.4	158.4	1994	94.1	23.0	117.1
1978	46.0	27.3	73.3				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was the assumed last day of stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 41. Chum salmon catch, escapement, and run numbers (in thousands of fish) in the Perryville District, 1962-1994.[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	17.9	10.5	28.4	1979	26.9	12.8	39.7
1963	19.1	7.0	26.1	1980	45.0	29.1	74.1
1964	10.6	26.0	36.6	1981	51.3	19.3	70.6
1965	12.8	7.0	19.8	1982	22.6	23.6	46.2
1966	7.9	20.4	28.3	1983	22.6	8.2	30.8
1967	1.7	5.7	7.4	1984	0.5	46.0	46.5
1968	14.0	1.8	15.8	1985	1.1	12.9	14.0
1969	21.1	1.0	22.1	1986	37.0	7.7	44.7
1970	26.3	13.0	39.3	1987	16.9	9.8	26.7
1971	40.9	30.0	70.9	1988	41.2	41.4	82.6
1972	12.3	11.5	23.8	1989	0.0	15.9	15.9
1973	0.0	9.3	9.3	1990	25.7	55.8	81.5
1974	0.0	12.5	12.5	1991	88.6	343.2	431.8
1975	0.0	20.5	20.5	1992	37.2	40.3	77.5
1976	15.7	8.9	24.6	1993	24.7	66.8	91.5
1977	3.4	15.4	18.8	1994	34.0	126.0	160.0
1978	32.1	5.3	37.4				

Table 42. Total chum salmon catch, escapement, and run numbers (in thousands of fish) in the Chignik Management Area, 1962-1994[a,b]

Year	Catch	Escapement	Run	Year	Catch	Escapement	Run
1962	364.2	220.3	584.5	1979	188.9	181.2	370.1
1963	112.7	107.0	219.7	1980	252.5	227.1	479.6
1964	333.3	255.1	588.4	1981	580.4	242.2	822.6
1965	120.6	112.2	232.8	1982	390.1	255.2	645.3
1966	239.3	104.9	344.2	1983	159.4	95.6	255.0
1967	75.5	140.7	216.2	1984	63.4	370.2	433.6
1968	223.8	89.9	313.7	1985	22.8	62.0	84.8
1969	67.7	103.1	170.8	1986	176.7	52.5	229.2
1970	437.3	233.1	670.4	1987	127.3	85.4	212.7
1971	353.8	469.5	823.3	1988	267.7	361.8	629.5
1972	78.3	195.4	273.7	1989	1.6	136.5	138.1
1973	8.7	116.9	125.6	1990	270.0	253.8	523.8
1974	34.3	148.4	182.7	1991	261.0	469.7	730.7
1975	25.2	126.1	151.3	1992	222.1	573.7	795.8
1976	81.4	206.4	287.8	1993	122.4	255.7	378.1
1977	110.4	151.6	262.0	1994	227.3	382.4	609.7
1978	120.9	104.3	225.2				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was assumed to be last day for stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 43. Pink salmon return per spawner in the Central and Eastern Districts, 1962-1994.[a,b]

Even Year Cycle				Odd Year Cycle			
Brood Year	Pink Escapement	Return 2-yrs Later	Return/ Spawner	Brood Year	Pink Escapement	Return 2-yrs Later	Return/ Spawner
1962	485,600	2,060,200	4.2	1963	218,800	225,800	1.0
1964	736,800	768,400	1.0	1965	130,600	123,200	0.9
1966	364,800	1,025,200	2.8	1967	74,600	118,700	1.6
1968	456,400	559,800	1.2	1969	115,600	147,300	1.3
1970	262,400	32,700	0.1	1971	97,800	65,800	0.7
1972	19,000	108,700	5.7	1973	63,000	81,200	1.3
1974	86,000	340,200	4.0	1975	49,900	396,100	7.9
1976	294,800	558,500	1.9	1977	275,900	1,068,100	3.8
1978	410,500	1,106,100	2.7	1979	491,300	614,500	1.3
1980	524,900	497,300	0.9	1981	231,200	73,000	0.3
1982	327,600	685,500	2.1	1983	57,300	242,200	4.2
1984	580,500	796,300	1.4	1985	219,500	291,200	1.3
1986	702,600	2,546,600	3.6	1987	281,300	1,096,000	3.9
1988	1,221,800	1,217,600	1.0	1989	1,096,000	528,100	0.5
1990	943,300	1,930,700	2.0	1991	326,100	943,400	2.9
1992	1,541,900	1,153,400	0.8	1993	685,600		
1994	1,042,200						

Table 44. Pink salmon return per spawner in the Western and Perryville Districts, 1962-1994.[a,b]

Even Year Cycle				Odd Year Cycle			
Brood Year	Pink Escapement	Return 2-yrs Later	Return/ Spawner	Brood Year	Pink Escapement	Return 2-yrs Later	Return/ Spawner
1962	397,500	472,500	1.2	1963	467,000	1,225,400	2.6
1964	237,000	530,700	2.2	1965	234,600	292,000	1.2
1966	269,300	771,700	2.9	1967	259,700	2,387,800	9.2
1968	280,000	1,088,700	3.9	1969	640,600	811,300	1.3
1970	274,600	43,300	0.2	1971	313,800	93,900	0.3
1972	16,400	151,000	9.2	1973	93,900	194,400	2.1
1974	137,600	444,500	3.2	1975	187,000	894,500	4.8
1976	203,500	1,191,000	5.9	1977	470,900	1,382,300	2.9
1978	490,900	545,400	1.1	1979	366,300	1,023,200	2.8
1980	214,300	680,000	3.2	1981	365,300	378,700	1.0
1982	59,300	472,400	8.0	1983	100,500	425,800	4.2
1984	297,800	586,400	2.0	1985	302,700	327,000	1.1
1986	224,300	1,966,300	8.8	1987	104,000	325,300	3.1
1988	413,700	313,900	0.8	1989	325,300	1,331,500	4.1
1990	132,700	1,216,300	9.2	1991	440,300	1,828,800	4.2
1992	229,200	524,900	2.3	1993	494,200		
1994	265,500						

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was assumed to be last day for stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 45. Chum salmon return per spawner in the Central and Eastern Districts, 1962-1994.[a,b]

Brood Year	Chum Escapement	Return 4-yrs Later	Return/ Spawner	Brood Year	Chum Escapement	Return 4-yrs Later	Return/ Spawner
1962	120,000	219,000	1.8	1979	124,300	85,300	0.7
1963	89,200	141,300	1.6	1980	141200	279400	2.0
1964	189,600	191,800	1.0	1981	152,100	20,600	0.1
1965	77,200	79,900	1.0	1982	194,800	86,900	0.4
1966	68,000	149,400	2.2	1983	67,200	74,100	1.1
1967	107,000	364,400	3.4	1984	250,100	194,500	0.8
1968	77,500	150,900	2.0	1985	14,500	109,000	7.5
1969	73,000	72,700	1.0	1986	39,500	308,900	7.8
1970	149,400	108,700	0.7	1987	55,800	144,700	2.6
1971	248,300	63,300	0.3	1988	277,700	586,700	2.1
1972	121,600	153,500	1.3	1989	109,000	239,000	2.2
1973	71,300	74,200	1.0	1990	167,700	305,700	1.8
1974	94,400	97,400	1.0	1991	88,400		
1975	60,100	171,800	2.9	1992	480,000		
1976	140,100	236,900	1.7	1993	174,600		
1977	63,800	421,500	6.6	1994	231,800		
1978	69,600	293,000	4.2				

Table 46. Chum salmon return per spawner in the Western and Perryville Districts, 1962-1994.[a,b]

Even Year Cycle				Odd Year Cycle			
Brood Year	Chum Escapement	Return 4-yrs Later	Return/ Spawner	Brood Year	Chum Escapement	Return 4-yrs Later	Return/ Spawner
1962	93,600	114,100	1.2	1979	55,300	152,900	2.8
1963	17,000	65,000	3.8	1980	85,600	145,700	1.7
1964	63,000	115,500	1.8	1981	89,600	59,300	0.7
1965	32,000	86,500	2.7	1982	59,000	124,100	2.1
1966	32,400	228,600	7.1	1983	28,300	133,300	4.7
1967	29,700	432,500	14.6	1984	119,800	212,700	1.8
1968	11,400	101,300	8.9	1985	47,500	23,300	0.5
1969	28,600	44,900	1.6	1986	13,000	201,900	15.5
1970	62,700	55,100	0.9	1987	29,500	568,500	19.3
1971	214,100	64,700	0.3	1988	68,800	196,300	2.9
1972	70,500	112,700	1.6	1989	23,300	130,600	5.6
1973	44,900	177,200	3.9	1990	84,600	277,100	3.3
1974	51,900	110,700	2.1	1991	381,300		
1975	63,900	164,500	2.6	1992	93,600		
1976	63,900	222,500	3.5	1993	80,800		
1977	85,800	362,500	4.2	1994	149,000		
1978	32,600	334,900	10.3				

[a] Post 1984 escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett, 1988). September 15 was assumed to be last day for stream entry.

[b] Catches (1970-1994) were updated using historical electronic fish ticket databases.

Table 47. Sockeye, coho, pink, and chum aerial stream survey counts in the Chignik Management Area, 1994[a]

Stream Date MM-DD-YY Observer	Visibility			Fish in Stream				Fish Build-Up		Observer Remarks
	Str	Mou	Bay	Sockeye	Coho	Pink	Chum	Mouth	Bay	
Big Spring Creek										
271-083 7-18-1994 David Owen	G	G	G	500	0	0	0			
Black Lake										
271-084 7-18-1994				3000	0	0	0			
271-084 8-10-1994 David Owen	G	G	G	125000	0	0	0			
Alec River										
271-085 7-18-1994 David Owen	G	G	G	18000	0	0	0			
271-085 8-10-1994 David Owen	G	G	G	350000	0	0	0			
Broad Creek										
271-087 7-18-1994 David Owen	G	G	G	1000	0	0	0			
271-087 8-10-1994 David Owen	G	G	G	20000	0	0	0			
Conglomerate Creek										
271-088 7-18-1994 David Owen	G	G	G	3000	0	0	0			
271-088 8-10-1994 David Owen	G	G	G	20000	0	0	0			
Cathedral Creek										
271-089 8-10-1994 David Owen	G	G	G	500	0	0	0			
Milk Creek										
271-090 7-18-1994 David Owen	G	G	G	0	0	0	0			
271-090 8-10-1994 David Owen	G	G	G	25000	0	0	0			
Fan Creek										
271-091 7-18-1994 David Owen	G	G	G	3000	0	0	0			
271-091 8-10-1994 David Owen	G	G	G	70000	0	0	0			

-Continued-

Table 47. (page 2 of 31)

Stream Date MM-DD-YY Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
Chiaktuak Creek										
271-092 8-10-1994 David Owen	G	G	G	31000	0	0	0			
Bearskin Creek										
271-095 8-10-1994 David Owen	G	G	G	5000	0	0	0			
Clark River										
271-097 8-10-1994 David Owen	G	G	G	0	0	0	0			
271-097 8-22-1994 David Owen	G	G	G	12000	0	0	0			
271-097 8-28-1994 David Owen	G	G	G	18000	0	0	0			
Home Creek										
271-099 8-10-1994 David Owen	G	G	G	0	0	0	0			
271-099 8-22-1994 David Owen	G	G	G	7200	0	0	0			
271-099 8-28-1994 David Owen	G	G	G	9200	0	0	0			
Jack Creek										
271-101A 8- 8-1994 David Owen	G	G	G	0	0	0	0			
271-101A 8-22-1994 David Owen	E	E	E	0	0	1200	0			
Lake Bay Creek										
271-101B 8- 8-1994 David Owen	G	G	G	0	0	0	0	3000P		
271-101B 8-15-1994 David Owen	G	G	G	0	0	500	500		5000P	
271-101B 8-22-1994 David Owen	E	E	E	0	0	2000	0	12000P		
Mud Bay										
271-102C 8- 8-1994 David Owen	G	G	G	200	0	0	0			

-Continued-

Table 47. (page 3 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
Alfred Creek												
271-104	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
271-104	8- 3-1994	David Owen	P	P	P	0	0	0	0			
271-104	8-15-1994	David Owen	G	G	G	0	0	0	0			
271-104	8-22-1994	David Owen	E	E	E	0	0	5000	0			
Frank Creek												
271-105	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
271-105	8- 3-1994	David Owen	P	P	P	0	0	0	0	1000Ch		
271-105	8-15-1994	David Owen	G	G	G	0	0	100	0		100P	
271-105	8-22-1994	David Owen	E	E	E	0	0	600	0			
Through Creek												
271-106	7-26-1994	A. Quimby	E	E	E	0	0	1000	0	3000P		
271-106	8- 3-1994	David Owen	P	P	P	0	0	0	0			
271-106	8-15-1994	David Owen	G	G	G	0	0	200	0			
271-106	8-22-1994	David Owen	E	E	E	0	0	4000	0			
271-10A	8-28-1994	David Owen	E	E	E	18000	0	0	0			
271-10B	8-28-1994	David Owen	E	E	E	9200	0	0	0			
Chignik Bay												
272-201	7-26-1994	A. Quimby	E	E	E	0	0	0	0			

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Table 47. (page 4 of 31)

Stream Date MM-DD-YY Observer	Visibility Str	Mou	Bay	Fish In Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-201 8- 3-1994 David Owen	P	P	P	0	0	0	0	200Ch		
272-201 8-15-1994 David Owen	G	G	G	0	0	0	0			
272-201 8-22-1994 David Owen	E	E	E	0	0	2000	0			
Chignik Bay										
272-202A 7-26-1994 A. Quimby	E	E	E	0	0	0	0			
272-202A 8- 3-1994 David Owen	P	P	P	0	0	0	500	300Ch		
272-202A 8-15-1994 David Owen	G	G	G	0	0	1000	0			
272-202A 8-22-1994 David Owen	E	E	E	0	0	13000	0			
272-202B 7-26-1994 A. Quimby	E	E	E	0	0	6000	0	4000P		
272-202B 8- 3-1994 David Owen	P	P	P	0	0	0	0			
272-202B 8-15-1994 David Owen	G	G	G	0	0	0	0			
272-202B 8-22-1994 David Owen	E	E	E	0	0	1500	0			
Thompson Creek										
272-204 7-26-1994 A. Quimby	E	E	E	0	0	6000	0	3000P		
272-204 8- 3-1994 David Owen	P	P	P	0	0	5000	4000			
272-204 8-15-1994 David Owen	G	G	G	0	0	6000	0			
272-204 8-22-1994 David Owen	E	E	E	0	0	42000	0			

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Table 47. (page 5 of 31)

Stream Date MM-DD-YY Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
Mckinsey Creek										
272-205 7-26-1994 A. Quimby	E	E	E	0	0	0	0			
272-205 8- 3-1994 David Owen	P	P	P	0	0	0	0			
272-205 8-15-1994 David Owen	G	G	G	0	0	0	0			
272-205 8-28-1994 David Owen	E	E	E	0	0	4000	0			
Dry Creek										
272-206 7-26-1994 A. Quimby	E	E	E	0	0	0	0			
272-206 8- 3-1994 David Owen	P	P	P	0	0	0	0			
272-206 8-15-1994 David Owen	G	G	G	0	0	500	0	100Co		
272-206 8-28-1994 David Owen	E	E	E	0	0	4000	0			
Hook Creek										
272-302 7-13-1994 Rich Price	G	G	G	0	0	0	0			
272-302 7-18-1994 Tom Vania	P	F	G	0	0	0	0			NO FISH SEEN - NO JUMPERS VISIBLE
272-302 7-19-1994 David Owen	E	E	E	0	0	0	0		200Ch	
272-302 7-22-1994 Rich Price	F	P	P	0	0	0	0	3Ch		HOOK BAY AREA OBSERVED A FEW JUMPERS AROUND MOUTH OF HOOK CREEK.
272-302 7-26-1994 A. Quimby	E	E	E	0	0	6500	0	4000P	1000P	
272-302 8- 3-1994 David Owen	P	P	P	0	0	0	3000			
272-302 8-15-1994 David Owen	G	G	G	0	0	0	0			

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Table 47. (page 6 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-302	8-28-1994	David Owen	E	E	E	0	1000	15000	8000			
Kumlium Creek												
272-501	7-22-1994	Rich Price	P	P	P	0	0	0	0			
272-501	7-26-1994	A. Quimby	E	E	E	0	0	0	0	25P		
272-501	8- 3-1994	David Owen	P	P	P	0	0	2000	0			
272-501	8-12-1994	David Owen	E	E	E	0	0	3000	0			
272-501	8-15-1994	David Owen	G	G	G	0	0	3000	0			
272-501	8-18-1994	David Owen	E	E	E	0	0	20000	0	1000P		
272-502	7-22-1994	Rich Price	G	P	P	0	0	0	0			
272-502	8-15-1994	David Owen	G	G	G	0	0	0	0			
272-502A	7-22-1994	Rich Price	P	P	P	0	0	0	0			
272-502A	8-12-1994	David Owen	E	E	E	0	0	300	0			
272-503	7-22-1994	Rich Price	G	P	P	0	0	0	0			CAPE KUMLIUN AREA
Kujulik Bay												
272-504	7-18-1994	Tom Vania	F	F	F	0	0	0	0		500Ch	NO SIGNIFICANT BUILDUP OF FISH IN THIS AREA
272-504	7-19-1994	David Owen	E	E	E	0	0	0	0		500Ch	2 JUMPERS

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Table 47. (page 7 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
Bear Creek												
272-505	7-13-1994	Rich Price	G	G	G	0	0	0	0		4000Ch	
272-505	7-18-1994	Tom Vania	P	P	F	0	0	0	0			JUMPERS SITED / BEAR WORKING STREAM
272-505	7-19-1994	David Owen	E	E	E	0	0	0	0		2000Ch	
272-505	7-26-1994	A. Quimby	E	E	E	0	0	0	12000	10000Ch		
272-505	8- 3-1994	David Owen	P	P	P	0	0	0	500			
272-505	8-15-1994	David Owen	G	G	G	0	0	0	0			
Packer's Creek												
272-506	7-18-1994	Tom Vania	F	F	F	0	0	0	0			JUMPERS ALONG BEACH
272-506	7-19-1994	David Owen	E	E	E	0	0	0	0		800Ch	
272-506	7-26-1994	A. Quimby	E	E	E	0	0	0	0	3000Ch		
272-506	8- 3-1994	David Owen	P	P	P	0	0	0	500			CHUM CARCUSSES
272-506	8-15-1994	David Owen	G	G	G	0	0	0	0			
272-506	8-28-1994	David Owen	E	E	E	0	0	0	0			
Kujulik Bay												
272-507	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-507	7-18-1994	Tom Vania	F	F	F	0	0	0	0			BEAR AT MOUTH
272-507	7-19-1994	David Owen	E	E	E	0	0	0	0		200Ch	
272-507	7-22-1994	Rich Price	G	P	P	0	0	0	0			

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Table 47. (page 8 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-507	7-26-1994	A. Quimby	E	E	E	0	0	0	1500	16000Ch		
272-507	8- 3-1994	David Owen	P	P	P	0	0	0	500			CHUM CARCUSSES
272-507	8-15-1994	David Owen	G	G	G	0	0	0	0			
272-507	8-28-1994	David Owen	E	E	E	0	0	0	0			
Kujulik Bay												
272-508	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-508	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-508	7-19-1994	David Owen	E	E	E	0	0	0	0		2000Ch	
272-508	7-26-1994	A. Quimby	E	E	E	0	0	0	1000			
272-508	8- 3-1994	David Owen	P	P	P	0	0	0	500			
272-508	8-15-1994	David Owen	G	G	G	0	0	3000	0			
272-508	8-28-1994	David Owen	E	E	E	0	0	2000	0			
Rudy's Creek												
272-509	7-13-1994	Rich Price	G	G	G	0	0	0	0		2000Ch	
272-509	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-509	7-19-1994	David Owen	E	E	E	0	0	0	0			1 JUMPER
272-509	7-26-1994	A. Quimby	E	E	E	0	0	0	20000	15000Ch		
272-509	8- 3-1994	David Owen	P	P	P	0	0	0	600			

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Table 47. (page 9 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-509	8-15-1994	David Owen	G	G	G	0	0	4000	0		3000P	
272-509	8-28-1994	David Owen	E	E	E	0	0	600	0			
272-510	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-510	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-510	7-19-1994	David Owen	E	E	E	0	0	0	1000			
272-510	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-510	8- 3-1994	David Owen	P	P	P	0	0	0	0			
272-510	8-15-1994	David Owen	G	G	G	0	0	500	0		150P	
272-510	8-28-1994	David Owen	E	E	E	0	0	0	0			
Kujulik Bay												
272-511A	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-511A	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-511A	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-511A	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-511A	8- 3-1994	David Owen	P	P	P	0	0	0	0			
272-511A	8-15-1994	David Owen	G	G	G	0	0	0	0			
Kujulik Bay												
272-511B	7-13-1994	Rich Price	G	G	G	0	0	0	0			

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Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-511B	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-511B	7-19-1994	David Owen	E	E	E	0	0	0	0		2000Ch	
272-511B	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-511B	8- 3-1994	David Owen	P	P	P	0	0	0	0			
272-511B	8-15-1994	David Owen	G	G	G	0	0	0	0		200P	
Kujulik Bay												
272-512	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-512	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-512	7-19-1994	David Owen	E	E	E	0	0	0	1000		200Ch	
272-512	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-512	8- 3-1994	David Owen	P	P	P	0	0	0	0			
272-512	8-15-1994	David Owen	G	G	G	0	0	0	0		200P	
272-512	8-28-1994	David Owen	E	E	E	0	0	0	0			
North Fork River												
272-514	7-13-1994	Rich Price	G	F	F	0	0	0	0		3000Ch	
272-514	7-18-1994	Tom Vania	P	P	F	0	0	0	0			COUPLE JUMPERS IN BAY
272-514	7-19-1994	David Owen	E	E	E	0	0	0	0	2000Ch		
272-514	7-22-1994	Rich Price	F	P	P	0	0	0	0			

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Table 47. (page 11 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-514	7-26-1994	A. Quimby	E	E	E	0	0	0	1200	4000Ch		
272-514	8- 3-1994	David Owen	P	P	P	0	0	2000	0			THREE JUMPERS IN BAY
272-514	8- 5-1994	David Owen	G	G	G	0	0	5000	0			
272-514	8-15-1994	David Owen	G	G	G	0	0	8000	0			
272-514	8-18-1994	David Owen	E	E	E	0	0	31000	0			
272-514	8-28-1994	David Owen	E	E	E	0	500	8000	0			New Fish in Lower Reaches
New Creek												
272-516	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-516	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-516	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-516	8- 5-1994	David Owen	G	G	G	0	0	1500	0			
272-516	8-15-1994	David Owen	G	G	G	0	0	2000	2000			
272-516	8-18-1994	David Owen	E	E	E	0	0	17000	0			
Wolverine Creek												
272-602	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-602	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-602	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-602	7-22-1994	Rich Price	G	P	P	0	0	0	0			ANIAKCHAK BAY AREA AND LAGOON OBSERVED A FEW JUMPERS.

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Table 47. (page 12 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish In Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-602	7-26-1994	A. Quimby	E	E	E	0	0	100	0			
272-602	8-15-1994	David Owen	G	G	G	0	0	0	4000			OLD FISH
Village Creek												
272-603	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-603	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-603	7-19-1994	David Owen	E	E	E	0	0	0	0		5000Ch	
272-603	7-22-1994	Rich Price	G	P	P	0	0	0	0			
272-603	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-603	8- 5-1994	David Owen	G	G	G	0	0	100	0			
272-603	8-15-1994	David Owen	G	G	G	0	0	0	0			
272-603	8-18-1994	David Owen	E	E	E	0	0	12000	0			
Black Creek												
272-604	7-18-1994	Tom Vania	F	F	P	0	0	0	0			
272-604	7-19-1994	David Owen	E	E	E	0	0	0	0		3000Ch	
272-604	7-22-1994	Rich Price	G	P	P	0	0	0	0			
272-604	7-26-1994	A. Quimby	E	E	E	0	0	0	0			JUMPERS IN THE LAGOON
272-604	8- 3-1994	David Owen	P	P	P	0	0	0	0			
272-604	8- 5-1994	David Owen	G	G	G	0	0	0	0			

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Table 47. (page 13 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-604	8-12-1994	David Owen	E	E	E	0	0	15000	200	1000P		
272-604	8-15-1994	David Owen	G	G	G	0	0	0	0			
272-604	8-18-1994	David Owen	E	E	E	0	0	200	0			
272-604	8-28-1994	David Owen	E	E	E	0	200	1000	0			
Aniakchak River												
272-605	7-13-1994	Rich Price	G	G	G	0	0	0	100			A FEW FISH IN THE NORTH FORK
272-605	7-18-1994	Tom Vania	P	P	P	0	0	0	0			MUDDY WATER / NO JUMPERS
272-605	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-605	7-19-1994	David Owen	E	E	E	0	0	0	0		2000Ch	
272-605	7-22-1994	Rich Price	G	F	F	0	0	0	200			AMBER BAY AREA HAS RAIN AND CLOUDY FOR VERY POOR VISIBILITY
272-605	7-26-1994	A. Quimby	E	E	E	0	0	0	6660			JUMPERS AT THE MOUTH
272-605	8- 3-1994	David Owen	P	P	P	0	0	0	0			
272-605	8- 5-1994	David Owen	G	G	G	0	0	60000	40000			
272-605	8-18-1994	David Owen	E	E	E	2000	0	0	19000			CHUMS WHITE - BACKED SURVEYED ONLY THIS PORTION
272-605	8-28-1994	David Owen	E	E	E	0	6000	0	0			In Lower Reaches
Fred Gungus												
272-606	7-18-1994	Tom Vania	F	F	F	0	0	0	0			
272-606	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-606	8- 5-1994	David Owen	G	G	G	0	0	1000	0		300P	

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Table 47. (page 14 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-606	8-12-1994	David Owen	E	E	E	0	0	20000	0			
272-606	8-18-1994	David Owen	E	E	E	0	0	35000	0			LOT OF WHITE BACKS, 3 BEARS
272-606	8-28-1994	David Owen	E	E	E	0	500	11000	0			New Fish at Terminus
West Creek												
272-701	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-701	7-18-1994	Tom Vania	P	P	P	0	0	0	0			NO JUMPERS IN AMBER BAY
272-701	7-19-1994	David Owen	E	E	E	0	0	0	0			ANIAKCHAK BAY LOTS OF SMALL SCHOOLS
272-701	7-26-1994	A. Quimby	E	E	E	0	0	0	100			
272-701	8- 5-1994	David Owen	G	G	G	0	0	400	0			
272-701	8-18-1994	David Owen	E	E	E	0	0	12000	0			
272-701	8-28-1994	David Owen	E	E	E	0	0	7000	0			
Main Creek												
272-702	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-702	7-18-1994	Tom Vania	P	P	P	0	0	0	0			
272-702	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-702	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-702	8- 5-1994	David Owen	G	G	G	0	0	8000	500			
272-702	8-12-1994	David Owen	E	E	E	0	200	11000	0			OK ESCAPEMENT

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Table 47. (page 15 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-702	8-18-1994	David Owen	E	E	E	0	500	30000	0			LOTS OF FISH IN LOWER PART
272-702	8-28-1994	David Owen	E	E	E	0	4000	7000	0			Several Sport Fishermen
Northeast Creek												
272-703	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-703	7-18-1994	Tom Vania	P	P	P	0	0	0	0			
272-703	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-703	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-703	8- 5-1994	David Owen	G	G	G	0	0	900	100			
272-703	8-12-1994	David Owen	E	E	E	0	200	18000	0			OK ESCAPEMENT
272-703	8-18-1994	David Owen	E	E	E	0	200	40000	5000			
272-703	8-28-1994	David Owen	E	E	E	0	500	21000	4000			
Cape Kunmik												
272-704	7-19-1994	David Owen	E	E	E	0	0	0	0			
Yantarni Bay												
272-720	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-720	8- 5-1994	David Owen	G	G	G	0	0	0	0			
272-720	8-12-1994	David Owen	E	E	E	0	200	3500	0			
272-720	8-18-1994	David Owen	E	E	E	0	0	5000	0			
Yantarni Creek												
272-721	7-19-1994	David Owen	E	E	E	0	0	0	0			

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Table 47. (page 16 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-721	7-26-1994	A. Quimby	E	E	E	0	0	0	0		500Ch	
272-721	8- 5-1994	David Owen	G	G	G	0	0	0	0			
272-721	8-12-1994	David Owen	E	E	E	0	200	3700	0			
272-721	8-18-1994	David Owen	E	E	E	0	0	30000	4000			
272-721	8-28-1994	David Owen	E	E	E	0	1000	34000	3000			
Ocean Beach												
272-801	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-801	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-801	8- 5-1994	David Owen	G	G	G	0	0	800	0			
272-801	8-12-1994	David Owen	E	E	E	0	0	400	0			
272-801	8-18-1994	David Owen	E	E	E	0	300	15000	10000			UPPER REACHES DRY
272-801	8-28-1994	David Owen	E	E	E	0	1000	38000	2000			
Ocean Beach (North)												
272-802	7-19-1994	David Owen	E	E	E	0	0	0	0			
272-802	7-26-1994	A. Quimby	E	E	E	0	0	0	200			FISH CAMP 8 WEATHERPORTS
272-802	8- 5-1994	David Owen	G	G	G	0	0	500	300			
272-802	8-12-1994	David Owen	E	E	E	0	0	5000	700			OK ESCAPEMENT (1,500)
272-802	8-18-1994	David Owen	E	E	E	0	500	6000	5000			

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Table 47. (page 17 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-802	8-28-1994	David Owen	E	E	E	0	5000	7000	2000			
Nakalilok Bay												
272-803	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-803	7-19-1994	David Owen	E	E	E	0	0	0	0		200Ch	
272-803	7-26-1994	A. Quimby	E	E	E	0	0	0	0			SPORT CAMP 10 TENTS & 1 WEATHERPORT
272-803	8- 5-1994	David Owen	G	G	G	0	0	200	0			
272-803	8-12-1994	David Owen	E	E	E	0	0	0	0		2000P	
272-803	8-18-1994	David Owen	E	E	E	0	0	7000	0	300Co		
272-803	8-28-1994	David Owen	E	E	E	0	0	1000	0			
Nakalilok River												
272-804	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-804	7-19-1994	David Owen	E	E	E	0	0	0	0		500Ch	
272-804	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-804	8- 5-1994	David Owen	G	G	G	0	0	0	5000			
272-804	8-12-1994	David Owen	E	E	E	0	0	1000	0		50000P	OK ESCAPEMENT (2,800)
272-804	8-18-1994	David Owen	E	E	E	0	0	40000	3000		10000P	
272-804	8-28-1994	David Owen	E	E	E	0	5000	42000	2000			
Nakalilok Bay(North)												
272-805	7-13-1994	Rich Price	G	G	G	0	0	0	0			

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Table 47. (page 18 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-805	7-19-1994	David Owen	E	E	E	0	0	0	0	1500Ch		
272-805	7-26-1994	A. Quimby	E	E	E	0	0	0	0		200Ch	
272-805	8- 5-1994	David Owen	G	G	G	0	0	500	0			
272-805	8-12-1994	David Owen	E	E	E	0	0	1400	0		5000P	OK ESCAPEMENT (800)
272-805	8-18-1994	David Owen	E	E	E	0	0	15000	0		5000P	
272-805	8-28-1994	David Owen	E	E	E	0	0	12000	0	5000P		
272-900	8- 5-1994	David Owen	G	G	G	0	0	200	0			
272-900	8-12-1994	David Owen	E	E	E	0	0	3000	0			
272-900	8-18-1994	David Owen	E	E	E	0	0	8000	0		5000P	OVERESCAPED
272-900	8-28-1994	David Owen	E	E	E	0	0	0	0			
Cape Kuyuyukak												
272-901	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-901	8- 5-1994	David Owen	G	G	G	0	0	0	0			
272-901	8-12-1994	David Owen	E	E	E	0	3000	0	0		2000P	OK ESCAPEMENT (1,100)
272-901	8-18-1994	David Owen	E	E	E	0	0	11000	0	3000P		WAY OVERESCAPED
272-901	8-28-1994	David Owen	E	E	E	0	0	1000	0			Most Fish Spawned-Carcuses
Cape Kuyuyukak												
272-902	7-13-1994	Rich Price	G	G	G	0	0	0	0			

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Table 47: (page 19 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-902	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-902	8- 5-1994	David Owen	G	G	G	0	0	4000	0			
272-902	8-12-1994	David Owen	E	E	E	0	0	10000	0	2000P		OK ESCAPEMENT (2,800)
272-902	8-18-1994	David Owen	E	E	E	0	0	35000	0		2000P	
272-902	8-28-1994	David Owen	E	E	E	0	0	10000	0			
Chiginagak River												
272-903A	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-903A	8- 5-1994	David Owen	G	G	G	0	0	500	0			
272-903A	8-12-1994	David Owen	E	E	E	0	0	4000	0	2000Ch	2000P	OK ESCAPEMENT
272-903A	8-18-1994	David Owen	E	E	E	0	0	35000	3000	1000P 5000Ch		Stream Dried Upper Reaches
272-903A	8-28-1994	David Owen	E	E	E	0	200	13000	0			
Chiginagak Bay												
272-903B	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-903B	8-18-1994	David Owen	E	E	E	0	0	8000	0	3000P		
Chiginagak Bay												
272-904	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-904	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-904	8- 5-1994	David Owen	G	G	G	0	0	2500	0			

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Table 47. (page 20 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-904	8-12-1994	David Owen	E	E	E	0	0	6000	3000			
272-904	8-18-1994	David Owen	E	E	E	0	0	30000	5000	40000P 5000Ch		
272-904	8-28-1994	David Owen	E	E	E	0	0	75000	0	20000P		
Chiginagak Bay												
272-905	7-13-1994	Rich Price	G	G	G	0	0	0	0			
272-905	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-905	8- 5-1994	David Owen	G	G	G	0	0	3000	0			
272-905	8-12-1994	David Owen	E	E	E	0	0	10000	4000		1000P	
272-905	8-18-1994	David Owen	E	E	E	0	0	3000	6000			
272-905	8-28-1994	David Owen	E	E	E	0	0	35000	0	3000Co		
Chiginagak Bay												
272-906	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-906	8-12-1994	David Owen	E	E	E	0	0	5000	5000			OK ESCAPEMENT
272-906	8-18-1994	David Owen	E	E	E	0	0	3000	5000			
272-906	8-28-1994	David Owen	E	E	E	0	0	0	3000			
Chiginagak Bay												
272-907	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-907	8-18-1994	David Owen	E	E	E	0	0	4000	0		2000P	

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Table 47. (page 21 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
272-907	8-28-1994	David Owen	E	E	E	0	0	0	0			
Port Wrangell Bay												
272-921	7-26-1994	A. Quimby	E	E	E	0	0	0	0			
272-921	8- 5-1994	David Owen	F	F	F	0	0	0	0			
272-921	8-12-1994	David Owen	F	F	F	0	0	0	1000			
272-921	8-18-1994	David Owen	G	G	E	0	0	13000	3000			
Port Wrangell Bay												
272-922	8-12-1994	David Owen	E	E	E	0	0	500	0	500P		
272-922	8-18-1994	David Owen	E	E	E	0	0	1000	0			
Agripina River												
272-961A	7-26-1994	A. Quimby	E	E	E	0	0	0	0			JUMPERS IN BAY
272-961A	8- 5-1994	David Owen	G	G	G	0	0	200	4000			
272-961A	8-12-1994	David Owen	E	E	E	0	0	40000	25000		4000P	OK ESCAPEMENT
272-961A	8-18-1994	David Owen	E	E	E	0	0	20000	5000	25000P		
Agripina Slough												
272-961B	7-26-1994	A. Quimby	0	0	0	0	0	0	0			200 REDS IN SMALL LAKE
272-961B	8- 5-1994	David Owen	G	G	G	3000	0	0	0			
272-961B	8-12-1994	David Owen	E	E	E	6000	0	0	0			
272-961B	8-18-1994	David Owen	E	E	E	0	0	1000	0	4000P		

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Table 47. (page 22 of 31)

Stream Date MM-DD-YY Observer	Visibility			Fish in Stream				Fish Build-Up		Observer Remarks
	Str	Mou	Bay	Sockeye	Coho	Pink	Chum	Mouth	Bay	
Glacier Creek										
272-962 7-26-1994 A. Quimby	E	E	E	0	0	0	100			JUMPERS IN THE BAY
272-962 8- 5-1994 David Owen	P	P	P	0	0	0	0			
272-962 8-12-1994 David Owen	E	E	E	0	0	0	0			
272-962 8-18-1994 David Owen	E	E	E	0	0	1000	0	2000P		
Glacier Creek										
272-962A 7-26-1994 A. Quimby	E	E	E	0	0	0	0			
272-962A 8- 5-1994 David Owen	P	P	P	0	0	0	0			
272-962A 8-12-1994 David Owen	E	E	E	0	0	0	0	2500P		
272-962A 8-18-1994 David Owen	E	E	E	0	0	2000	0	10000P		
Kilokak Creek										
272-963 8- 5-1994 David Owen	G	G	G	0	0	5000	0			IN LOWER PORTION OF STREAM
272-963 8-12-1994 David Owen	E	E	E	0	0	8000	0	10000P		
272-963 8-18-1994 David Owen	E	E	E	0	0	10000	0	40000P	20000P	DRIED UP
273-601 7-24-1994 Rich Price	G	F	F	0	0	0	0			
Red Bluff Creek										
273-702 7-13-1994 Rich Price	G	G	G	0	0	0	0			
273-702 7-18-1994 Tom Vania	F	F	F	0	0	0	0			
273-702 7-24-1994 Rich Price	G	F	F	0	0	0	0			

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Table 47. (page 23 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
273-702	7-27-1994	Dave Henly	P	P	P	0	0	0	3000			FLASHING & OCCASIONAL SCHOOL SPREAD ON BOTTOM
273-702	8- 3-1994	David Owen	P	P	P	0	0	2500	7500			
273-702	8-12-1994	David Owen	E	E	E	0	0	3200	0			SURVEYED LOWER CREEK +12,000
273-702	8-15-1994	David Owen	G	G	G	0	0	0	0			
273-702	8-19-1994	David Owen	E	E	E	0	0	17000	0			
273-702	8-28-1994	David Owen	E	E	E	0	0	4000	0			
Mitrofania Bay												
273-720	7-13-1994	Rich Price	G	G	G	0	0	0	0			
273-720	7-18-1994	Tom Vania	P	P	P	0	0	0	0			MUDDY STREAM, MOUTH AND BAY
273-720	7-24-1994	Rich Price	P	P	P	0	0	0	0			MUDDY CONDITIONS
273-720	8- 8-1994	David Owen	G	G	G	0	0	0	0			
Ivan River												
273-722	7-13-1994	Rich Price	G	G	G	0	0	0	0			
273-722	7-18-1994	Tom Vania	G	G	F	0	0	0	0			
273-722	7-24-1994	Rich Price	G	F	F	0	0	0	0			IN METROFANIA BAY AREA
273-722	7-27-1994	Dave Henly	G	G	G	0	0	0	0			
273-722	8- 3-1994	David Owen	P	P	P	0	0	0	0		1000P	
273-722	8- 8-1994	David Owen	G	G	G	0	0	0	0			

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Table 47. (page 24 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
273-722	8-12-1994	David Owen	E	E	E	0	0	12000	0			NOTHING HIGH OR LOW, ALL IN ONE SECTION
273-722	8-15-1994	David Owen	G	G	G	0	0	2000	0			
273-722	8-19-1994	David Owen	E	E	E	0	0	30000	0			
273-722	8-28-1994	David Owen	E	E	E	0	0	21000	0			New Fish-3000
Fishrack Bay												
273-723	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
273-723	7-24-1994	Rich Price	G	F	F	0	0	0	0			
273-723	7-27-1994	Dave Henly	G	G	G	0	0	0	0			
273-723	8- 3-1994	David Owen	P	P	P	0	0	0	0			
273-723	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-723	8-12-1994	David Owen	E	E	E	0	0	100	0			
273-723	8-15-1994	David Owen	G	G	G	0	0	400	0	2000P		
273-723	8-19-1994	David Owen	E	E	E	0	0	1300	0	2000P		
Foot Creek												
273-802	7-13-1994	Rich Price	G	G	G	0	0	0	0	200Ch		
273-802	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
273-802	7-24-1994	Rich Price	G	F	F	0	0	0	0			
273-802	7-27-1994	Dave Henly	G	G	G	0	0	0	0			

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Table 47. (page 25 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
273-802	8- 3-1994	David Owen	P	P	P	0	0	300	0			
273-802	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-802	8-12-1994	David Owen	E	E	E	0	0	1500	0	600P		
273-802	8-15-1994	David Owen	G	G	G	0	0	2500	0	3000P		
273-802	8-19-1994	David Owen	E	E	E	0	0	4000	0	3000P		
Windy Creek												
273-821	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
273-821	7-24-1994	Rich Price	E	F	F	0	0	0	0			
273-821	8- 8-1994	David Owen	G	G	G	0	0	30	0			
273-821	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-821	8-15-1994	David Owen	G	G	G	0	0	0	50	1500Ch		JUMPER IN BAY
273-821	8-19-1994	David Owen	E	E	E	0	0	0	0	3000P		DRIED UP
273-822	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-822	8-15-1994	David Owen	G	G	G	0	0	0	0	500Ch		
273-822	8-19-1994	David Owen	E	E	E	0	0	2000	0	2000P		
Spoon Creek												
273-823	7-24-1994	Rich Price	E	F	F	0	0	0	0			
273-823	7-27-1994	Dave Henly	G	G	G	0	0	0	0			

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Table 47. (page 26 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
273-823	8- 3-1994	David Owen	P	P	P	0	0	0	0	300Ch		
273-823	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-823	8-12-1994	David Owen	E	E	E	0	0	500	0	300P		
273-823	8-15-1994	David Owen	G	G	G	0	0	0	200	300Ch		
273-823	8-19-1994	David Owen	E	E	E	0	0	400	0			
Portage Creek												
273-842	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
273-842	7-24-1994	Rich Price	G	F	F	0	0	0	0			
273-842	7-27-1994	Dave Henly	G	F	F	0	0	0	0		500Ch	DIDN'T SEE SCHOOLS, JUST JUMPERS
273-842	8- 3-1994	David Owen	P	P	P	0	0	0	200			2 JUMPERS
273-842	8- 8-1994	David Owen	G	G	G	0	0	0	1500	300Ch		
273-842	8-12-1994	David Owen	E	E	E	0	0	5000	0		1000P	OK ESCAPEMENT
273-842	8-15-1994	David Owen	G	G	G	0	0	0	6000	4000Ch		
273-842	8-19-1994	David Owen	E	E	E	0	0	8000	2000	4000Ch	3500Ch	
273-842	8-28-1994	David Owen	E	E	E	0	0	14000	2000	200Ch		
Seal Bay												
273-843	8- 3-1994	David Owen	P	P	P	0	0	0	0	100P 100Ch		
273-843	8- 8-1994	David Owen	G	G	G	0	0	0	50			

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Table 47. (page 27 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
273-843	8-15-1994	David Owen	G	G	G	0	0	0	300			SPAWNING
273-843	8-19-1994	David Owen	E	E	E	0	0	1000	3000	4000P		
Seal Bay												
273-844	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-844	8-15-1994	David Owen	G	G	G	0	0	0	0	50Ch		
273-844	8-19-1994	David Owen	E	E	E	0	0	0	0			
Dog Bay												
273-845	8- 3-1994	David Owen	P	P	P	0	0	0	0			
273-845	8- 8-1994	David Owen	G	G	G	0	0	1000	0			
273-845	8-15-1994	David Owen	G	G	G	0	0	0	300	500Ch		SPAWNING
273-845	8-19-1994	David Owen	E	E	E	0	0	0	2700			
Castle Creek												
273-941	8- 8-1994	David Owen	G	G	G	0	0	0	0			
273-941	8-15-1994	David Owen	G	G	G	0	0	200	50		5000P	
273-941	8-22-1994	David Owen	E	E	E	0	0	3000	1000	18000P		
Hag Creek												
275-400	8- 3-1994	David Owen	P	P	P	0	0	0	0			
275-400	8-19-1994	David Owen	E	E	E	0	0	0	0	500P		
Kupreanof Peninsula												
275-401	8- 3-1994	David Owen	P	P	P	0	0	700	0	400P		

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Table 47. (page 28 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
275-401	8-19-1994	David Owen	E	E	E	0	0	8000	0			
Smokey Hollow Creek												
275-402	7-24-1994	Rich Price	F	F	F	0	0	0	0			
275-402	7-27-1994	Dave Henly	F	F	F	0	0	0	2500			MOST IN SCHOOLS, SOME GOING UP
275-402	8- 3-1994	David Owen	P	P	P	0	0	0	3500			
275-402	8-19-1994	David Owen	E	E	E	0	0	1000	0	500P	500P	
Ivanof Bay												
275-403	7-24-1994	Rich Price	F	F	F	0	0	0	0			
275-403	8- 3-1994	David Owen	P	P	P	0	0	0	0			
Wasco's Creek												
275-404	7-24-1994	Rich Price	F	F	F	0	0	0	0			
275-404	7-27-1994	Dave Henly	G	G	G	0	0	0	0			
275-404	8- 3-1994	David Owen	P	P	P	0	0	0	0			A FEW FISH < 100
275-404	8-19-1994	David Owen	E	E	E	0	0	2000	0			
Sunnyside Creek												
275-405	7-24-1994	Rich Price	F	F	F	0	0	0	0			
Ivanof River												
275-406	7-13-1994	Rich Price	E	G	G	0	0	0	6000		150000Ch	
275-406	7-18-1994	Tom Vania	G	G	F	0	0	0	12500	7500Ch	20000Ch	FISH SPREAD OUT UP TO THE HEAD WATERS
275-406	7-24-1994	Rich Price	G	F	F	0	0	0	25000			JUMPERS IN BAY. WATER CLARITY POOR

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Table 47. (page 29 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
275-406	7-27-1994	Dave Henly	G	G	F	0	0	0	40000		20000Ch	MAIN FORK (RIGHT) 32,000 MIDDLE FORK 7,000 LEFT FORK 1,500
275-406	8- 3-1994	David Owen	P	P	P	0	0	3000	65000		500P 2000Ch	
275-406	8-15-1994	David Owen	G	G	G	0	0	12250	3500	40000P		
275-406	8-19-1994	David Owen	E	E	E	0	0	35000	55000	5000P 5000Ch		
275-406	8-28-1994	David Owen	E	E	E	0	0	53000	0	30000Ch		
Wolverine Cove												
275-408	7-13-1994	Rich Price	G	G	G	0	0	0	0			
275-408	7-27-1994	Dave Henly	F	F	F	0	0	0	0			
275-408	8- 3-1994	David Owen	P	P	P	0	0	0	0	200P		
275-408	8-12-1994	David Owen	E	E	E	0	0	300	0	200P		
275-408	8-19-1994	David Owen	E	E	E	0	0	200	0	1500P		
Humpback Creek												
275-502	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
275-502	7-24-1994	Rich Price	G	F	F	0	0	0	0			
275-502	7-27-1994	Dave Henly	G	G	G	0	0	0	500			FISH IN POOL NEAR MOUTH, NO FISH UP STREAM

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Table 47. (page 30 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
275-502	8- 3-1994	David Owen	P	P	P	0	0	2000	0	2000P	5000P	
275-502	8-12-1994	David Owen	E	E	E	0	0	16000	0			5,000 AT CURVE NEAR TENT PLATFORM
275-502	8-19-1994	David Owen	E	E	E	0	0	40000	2000			10 - 15,000 AT PLATFORM
Humpback Bay												
275-503	7-13-1994	Rich Price	G	G	G	0	0	0	0			
275-503	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
275-503	7-24-1994	Rich Price	G	F	F	0	0	0	0			
275-503	8- 3-1994	David Owen	P	P	P	0	0	0	0			
275-503	8-15-1994	David Owen	G	G	G	0	0	6000	0			
275-503	8-19-1994	David Owen	E	E	E	0	0	1000	0	1500P		
Humpback Bay Creek												
275-504	7-13-1994	Rich Price	G	G	G	0	0	0	0			
275-504	7-18-1994	Tom Vania	G	G	0	0	0	0	0			
275-504	7-24-1994	Rich Price	G	F	F	0	0	0	0			
275-504	8- 3-1994	David Owen	P	P	P	0	0	0	0		5000P	
275-504	8-12-1994	David Owen	E	E	E	0	0	3000	0			
Alexander Point												
275-505	7-18-1994	Tom Vania	G	G	G	0	0	0	0			
275-505	7-27-1994	Dave Henly	G	G	G	0	0	100	0			

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Table 47. (page 31 of 31)

Stream	Date MM-DD-YY	Observer	Visibility Str	Mou	Bay	Fish in Stream Sockeye	Coho	Pink	Chum	Fish Build-Up Mouth	Bay	Observer Remarks
275-505	8- 3-1994	David Owen	P	P	P	0	0	0	0			
275-505	8-12-1994	David Owen	E	E	E	0	0	0	0	1000P		
275-505	8-15-1994	David Owen	G	G	G	0	0	2000	0	500P		
275-505	8-19-1994	David Owen	E	E	E	0	0	0	0	2000P		
275-505	8-28-1994	David Owen	E	E	E	0	0	3000	0	10000P		
Kametolook River												
275-600	7-13-1994	Rich Price	G	G	G	0	0	0	0			
275-600	7-18-1994	Tom Vania	P	P	P	0	0	0	0			
275-600	7-24-1994	Rich Price	P	P	P	0	0	0	0			MUDDY CONDITIONS
Kametolook River (N)												
275-601	7-13-1994	Rich Price	G	G	G	0	0	0	0			
275-601	7-18-1994	Tom Vania	P	P	P	0	0	0	0			MUDDY CONDITIONS
275-601	7-27-1994	Dave Henly	P	P	P	0	0	0	0			NOT MUCH SUBSISTENCE FISHING
275-601	8-19-1994	David Owen	E	E	E	0	0	500	200			

[a] Surveys are directed primarily at estimating escapement for pink and chum salmon and sockeye in the Chignik Lakes system.

Table 48. Pink and chum salmon escapement estimates (in thousands of fish) for select Chignik Management Area streams, 1953-1994 . [a,b]

	Thompson Valley		Hook Bay		Cape Kumlik		Bear Cr.	
	272-204		272-302		272-501		272-505	
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953	25.3	0.0	13.0	6.3			0.0	0.7
1954	28.2	4.5	14.3	5.3			0.2	0.2
1955	115.0	3.0	78.0	0.0			1.0	0.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	7.0	0.0	18.9	4.1	7.0	0.0	0.0	12.4
1963	23.3	0.0	33.0	7.5	23.0	0.0	0.0	9.5
1964	4.1	0.0	42.0	1.2	8.7	0.0	0.0	8.8
1965	9.4	0.0	23.3	2.1	13.7	0.0	0.0	8.5
1966	4.1	0.0	10.0	0.5	3.8	0.0	0.0	4.3
1967	2.0	0.4	7.3	2.5	5.2	0.0	0.0	8.0
1968			5.0	0.0			0.0	2.7
1969	19.0	0.0	30.0	0.0			0.0	4.5
1970	12.0	0.0	11.0	1.0	5.0	0.0	0.0	10.0
1971	7.5	0.0	13.0	8.0	51.0	0.0	0.0	10.0
1972	0.2	0.0	0.4	1.1	0.2	0.0	0.0	2.5
1973	2.3	0.2	4.9	4.7	40.0	0.0	0.0	4.0
1974	1.6	0.1	3.8	0.8	0.6	0.0	0.0	2.3
1975	10.2	0.0	1.3	6.0	17.8	0.0	0.0	1.5
1976	5.5	0.2	8.0	2.5	2.6	0.0	0.0	1.4
1977	29.4	0.0	22.6	2.0	124.0	0.0	0.5	2.6
1978	14.0	0.0	14.5	2.8	6.1	0.0	0.1	1.5
1979	35.5	1.0	42.7	11.0	153.0	0.0	0.0	5.0
1980	0.7	0.0	24.5	4.2	2.6	0.0	0.2	0.0
1981	6.5	0.5	13.9	9.0	36.2	0.0	0.1	0.0
1982	1.2	0.0	7.3	10.0	0.9	0.0	0.0	2.5
1983	2.3	0.0	0.2	0.3	0.0	0.0	2.0	7.9
1984	14.0	0.0	16.2	0.1	3.7	0.0	0.3	2.3
1985	0.0	0.0	2.0	0.0			0.0	7.2
1986	0.3	0.0	66.9	0.0	38.2	0.0	0.0	7.5
1987			9.5	0.3	46.9	0.3	0.0	12.0
1988	9.6	3.3	26.4	0.7	18.0	0.0	0.0	0.7
1989	16.6	3.7	45.5	10.2	63.0	0.0	0.0	3.6
1990	4.8	0.0	16.7	0.2	3.2	0.0	0.3	T
1991	0.0	0.0	0.0	0.0	109.7	0.0	0.0	0.9
1992	61.2	0.0	7.2	7.5	15.4	0.0	0.0	20.8
1993	0.0	19.0	26.2	9.3	82.0	0.0	0.0	1.4
1994	48.0	4.0	21.5	8.9	21.0	0.0	0.0	22.0

-Continued-

Table 48. (page 2 of 8)

Year	Rudys Cr. 272-509 Pink	Rudys Cr. 272-509 Chum	North Fork 272-514 Pink	North Fork 272-514 Chum	Aniakchak R. 272-605 Pink	Aniakchak R. 272-605 Chum	Cape Agutka 272-606 Pink	Cape Agutka 272-606 Chum
1953	0.7	0.2	1.3	3.5	0.0	35.0	0.2	0.7
1954			55.0	4.6	100.0	37.2	3.9	1.5
1955	15.0	4.0	13.5	1.0	16.0	0.0	1.2	0.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	4.5	5.2	34.0	0.8	126.0	25.0	17.6	0.5
1963	0.0	12.0	9.7	1.8	6.0	14.6	0.4	0.0
1964	0.5	5.0	68.0	3.0	175.0	82.5	11.0	1.1
1965	0.0	1.1	8.7	2.0	10.8	4.0	5.1	0.1
1966	2.0	3.0	2.0		90.8	9.0	7.7	0.2
1967	1.0	3.0	20.0	1.1	2.0	10.5	1.1	0.1
1968	2.0	7.0	26.0	0.0	85.0	10.0	22.3	0.0
1969	0.2	1.0	5.2	4.0	0.1	0.5	4.6	2.0
1970	0.0	3.0	24.0	8.0	40.0	30.5	10.0	2.0
1971	0.0	1.3	0.0	4.5	0.0	11.5	2.0	3.0
1972	0.2	1.7	1.7	6.9	1.8	7.1	2.5	1.5
1973	0.0	1.2	2.8	1.5	2.7	4.0	1.5	1.8
1974	0.8	4.2	2.5	4.2	29.8	25.7	1.6	0.0
1975	0.0	1.8	0.4	3.7	2.4	5.5	1.9	0.2
1976	6.2	3.7	17.5	7.9	165.0	34.0	5.9	0.8
1977	6.3	0.9	6.6	2.3	3.0	14.8	1.0	0.1
1978	4.0	2.2	46.0	6.9	215.5	23.2	8.0	0.2
1979	12.0	7.7	12.7	5.6	0.0	0.2	13.0	1.5
1980	9.3	0.0	38.5	29.5	40.0	43.0	20.0	5.5
1981	0.7	0.1	15.8	16.5	2.7	32.0	5.8	0.0
1982	0.2	8.7	19.0	3.5	130.0	47.0	21.0	0.0
1983	0.0	1.3	4.1	1.3	1.0	3.1	0.1	0.0
1984	4.5	5.0	32.4	17.4	56.4	47.0	17.2	1.2
1985	0.0	0.0	4.7	1.3	0.0	0.0	0.0	0.0
1986	38.0	10.9	34.3	5.0	1.5	0.5	65.0	0.4
1987	0.0	0.0	8.8	4.0	2.5	0.3	4.2	0.3
1988	34.9	16.6	48.5	17.0	95.1	17.4	84.4	0.0
1989	7.3	0.4	23.0	1.2	5.0	2.5	1.8	0.0
1990	8.0	1.3	40.9	0.7	19.7	11.6	46.5	0.0
1991	0.0	7.4	2.1	2.9	0.0	7.6	4.1	0.0
1992	15.0	48.2	42.3	59.7	96.6	53.8	161.9	16.8
1993	3.7	0.0	24.5	8.0	0.0	7.8	53.0	T
1994	4.0	35.0	31.0	5.2	60.0	40.0	35.0	0.0

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Table 48. (page 3 of 8)

Year	Main Cr. 272-702 Pink	Main Cr. 272-702 Chum	Northeast Cr. 272-703 Pink	Northeast Cr. 272-703 Chum	Yantarni R. 272-721 Pink	Yantarni R. 272-721 Chum	Ocean Beach 272-801 Pink	Ocean Beach 272-801 Chum
1953	0.2	17.0	3.5	2.0				
1954	6.9	21.5	1.1	0.8				
1955	25.2	0.8			7.5	7.0	8.0	3.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	33.0	3.6	1.6	2.5	52.5	0.1	45.0	2.0
1963	16.0	5.8	5.0	0.9	16.0	0.3	3.4	0.0
1964	40.5		2.3	3.0	42.0	21.0	34.6	10.1
1965	5.0	4.8	2.3	6.0	4.0	7.6	0.4	1.0
1966	3.0	0.0	1.3	0.2	18.5	5.0	11.0	3.3
1967	16.5	2.0	2.0	0.2				
1968	28.0	8.0	7.7	1.0	25.0	6.5	26.5	0.0
1969	3.0	15.0	7.0	4.5	1.5	11.0	6.0	3.5
1970	13.0	7.0	7.0	6.0	1.5	11.5	7.5	5.0
1971	1.0	20.0	2.0	5.5	0.0	18.0	0.0	3.5
1972	2.0	8.0	1.7	0.5	2.1	21.0	0.5	4.6
1973	1.0	7.0	1.1	3.1	0.3	6.5	0.6	1.7
1974	6.6	6.3	3.0	2.0	3.7	3.8	2.3	2.2
1975	4.7	8.0	0.4	0.7	0.3	1.6	0.8	0.2
1976	5.5	8.5	3.8	2.0	5.8	12.5	4.2	3.0
1977	4.5	3.5	10.0	0.8	1.9	3.5	1.1	0.4
1978	5.6	7.6	4.4	4.6	7.9	3.3	7.1	0.5
1979	13.5	14.0	7.0	7.5	14.0	9.5	1.5	0.0
1980	53.5	17.0	4.8	3.0	60.0	11.0	27.6	0.0
1981	6.3	16.3	5.9	2.5	13.5	18.2	10.5	5.5
1982	36.0	12.3	6.2	3.7	8.5	25.5	0.0	14.5
1983	9.2	6.7	3.2	4.7	3.6	13.4	3.1	1.5
1984	15.7	14.5	7.0	4.3	26.5	18.7	19.0	13.2
1985	13.7	4.0	9.0	0.0	67.8	0.7	9.9	0.0
1986	85.0	0.0	13.6	0.0	3.1	0.3	1.8	0.2
1987	14.3	1.5	7.5	0.4	18.0	3.0	13.0	2.7
1988	43.6	5.5	41.4	10.6	33.7	30.3	32.8	12.8
1989	53.0	3.2	17.0	4.0	10.9	3.4	10.9	4.8
1990	54.3	5.7	80.3	13.3	23.6	9.3	45.0	1.3
1991	0.0	8.4	1.9	8.8	5.3	1.7	0.0	2.8
1992	30.3	45.2	31.9	50.5	14.9	26.2	15.6	7.1
1993	26.5	14.0	24.2	0.0			10.0	23.0
1994	30.0	0.5	44.4	6.1	57.3	4.6	42.5	10.0

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Table 48. (page 4 of 8)

Year	Nakalilok R. 272-804 Pink	Nakalilok R. 272-804 Chum	Chiginagak 272-902 Pink	Chiginagak 272-902 Chum	Chiginagak R. 272-903 Pink	Chiginagak R. 272-903 Chum	Chiginagak 272-904 Pink	Chiginagak 272-904 Chum
1953								
1954								
1955	3.0	0.5			0.0	15.9		
1956								
1957								
1958								
1959								
1960								
1961								
1962	22.0	0.1	16.0	0.0	0.3	34.3	20.1	0.0
1963	10.4	0.1	1.2	0.0	0.0	15.0	43.0	0.0
1964	89.0	3.0	20.0	0.0	6.0	24.4	41.4	0.0
1965	0.5	9.0	0.4	0.0	0.0	13.8	12.4	0.1
1966	12.5	0.0	5.8	0.0	0.0	33.2	16.0	0.0
1967	3.5	18.5	0.5	0.1	0.0	27.0	12.4	0.0
1968	7.4	2.0	21.0	0.0	2.0	29.5	20.0	0.0
1969	8.0	3.5	1.3	0.0		20.0	6.0	0.0
1970	10.0	6.5	11.0	0.0	0.0	31.0	4.0	0.0
1971	1.0	44.0	2.8	0.0	0.0	86.0	1.1	0.0
1972	0.0	6.0	0.1	0.3	1.0	33.0	0.1	0.1
1973	0.5	5.2	0.3	0.0	0.2	28.3	0.5	0.0
1974	2.2	4.8	0.2	0.2	8.5	28.5	0.9	0.0
1975	3.0	4.8	0.5	0.5	2.9	20.3	0.8	0.0
1976	2.4	14.2	0.7	0.0	0.7	35.0	2.2	0.0
1977	3.8	4.9	2.7	0.0	1.8	19.4	3.8	0.0
1978	8.1	4.2	4.4	0.4	1.3	9.1	3.5	0.0
1979	12.0	2.9	11.0	15.0	0.4	24.3	7.2	0.0
1980	25.6	14.0	17.9	0.0	16.3	5.7	14.5	0.0
1981	6.5	8.0	5.0	0.0	6.0	23.4	6.9	0.0
1982	4.0	12.3	2.2	0.0	2.0	18.5	1.7	0.4
1983	4.8	4.2	0.7	0.0	1.8	9.6	1.9	0.0
1984	15.0	36.5	16.6	0.0	6.9	53.8	19.5	3.0
1985	27.0	0.0	0.0	0.0	1.0	0.0	5.0	0.0
1986	12.7	1.0	42.3	0.0	21.1	3.3	8.9	0.0
1987	1.4	3.8	3.2	0.4	67.5	15.7	11.0	3.3
1988	16.8	8.0	33.7	0.0	12.6	13.2	40.0	30.0
1989	10.6	4.1	22.0	0.0	70.4	4.2	32.0	11.5
1990	47.0	6.3	19.2	0.0	63.0	9.8	18.7	5.0
1991	0.0	4.1	18.6	0.0	0.3	0.0	0.5	5.5
1992	16.7	27.3	27.6	0.6	0.0	4.5	0.1	0.0
1993	30.0	33.0	35.3	0.0	59.8	10.0	59.3	10.0
1994	71.4	6.1	35.0	0.0	35.0	3.0	109.0	5.0

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Table 48. (page 5 of 8)

Year	Chiginagak 272-905 Pink	Chiginagak 272-905 Chum	Agripina R. 272-961 Pink	Agripina R. 272-961 Chum	Glacier Cr. 272-962 Pink	Glacier Cr. 272-962 Chum	Kilokak 272-963 Pink	Kilokak 272-963 Chum
1953								
1954								
1955					0.0	0.0		
1956								
1957								
1958								
1959								
1960								
1961								
1962	17.1	0.0	12.0	3.0	0.5	3.0	16.2	0.0
1963	1.0	0.0	19.2	0.1	0.0	10.0	0.8	0.0
1964	100.0	0.3	8.5	0.0	0.5	6.0	14.2	0.0
1965	1.2	0.0	20.1	0.0	0.0	1.3	0.1	0.0
1966	90.5	0.0					24.5	0.0
1967	5.8	1.8	7.3	0.5	0.0	5.6	0.3	0.0
1968	53.0	0.0	12.0	0.0	0.0	0.2	65.6	0.0
1969	2.4	0.0	2.5	0.0	0.0	2.0	0.2	0.0
1970	24.0	0.0	15.5	0.0	0.0	5.0	55.0	0.0
1971	4.3	2.0	6.6	0.0	0.0	6.0	0.0	0.0
1972	2.4	0.0	1.6	0.0	0.0	4.6	2.1	0.0
1973	1.0	0.0	4.2	0.5	0.0	3.0	0.1	0.0
1974	1.9	0.0	1.2	0.2	0.0	0.9	0.3	0.0
1975	2.1	0.2	2.7	0.0	0.2	0.5	0.6	0.0
1976	20.1	0.4	4.9	0.0	0.0	1.8	4.9	0.0
1977	22.0	1.3	4.3	0.0	0.0	1.0	0.5	0.0
1978	41.0	0.4	7.4	0.1	0.6	1.1	5.9	0.0
1979	61.1	0.0	23.5	0.0	0.0	1.6	1.1	0.0
1980	38.5	0.0	14.3	0.0	5.2	0.7	61.0	0.0
1981	48.0	0.1	13.4	0.0	0.0	0.6	0.3	0.0
1982	34.1	0.0	33.0	0.0	0.0	1.1	20.0	0.0
1983	3.6	5.0	5.0	0.0	1.3	0.2	0.3	0.0
1984	117.2	0.2	39.8	0.0	1.0	3.2	75.8	0.0
1985	17.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0
1986	85.0	0.1	0.0	0.0	0.0	0.0	175.0	0.0
1987	20.0	0.3	1.0	0.0	6.2	0.0	0.0	0.0
1988	52.9	14.4	78.0	20.6	0.3	0.0	137.8	0.0
1989	89.0	4.0	53.0	0.0	0.3	0.1	10.5	0.0
1990	84.8	2.4	33.3	0.0	1.1	0.2	83.4	0.0
1991	5.2	5.0	9.6	5.0	0.2	1.2	9.7	0.0
1992	137.8	5.1	180.5	5.7	10.4	0.0	157.8	0.0
1993	87.3	10.0	47.2	0.0	0.0	0.0	105.7	0.0
1994	45.0	6.0	65.0	25.0	3.0	0.1	70.0	0.0

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Table 48. (page 6 of 8)

Year	Coal Cape 273-702 Pink	Coal Cape 273-702 Chum	Ivan River 273-722 Pink	Ivan River 273-722 Chum	Foot Bay 273-802 Pink	Foot Bay 273-802 Chum	Spoon Cr. 273-823 Pink	Spoon Cr. 273-823 Chum
1953							1.0	1.5
1954								
1955							15.0	0.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	129.0	12.0	85.0	36.0	13.3	1.0	10.6	2.0
1963	127.5	0.0	124.0	4.5	11.0	1.0	3.5	0.0
1964	60.0	10.0	65.5		12.0	0.9	13.2	0.0
1965	48.0	5.9	89.1	0.0	5.3	0.0	1.4	0.0
1966	9.7	2.0	94.5	1.0	18.4	0.2	15.5	0.0
1967	9.0	1.0	35.0	7.0	4.7	0.0	2.4	0.0
1968	39.0		85.0	0.0	14.2	0.0	7.8	0.0
1969	77.0	0.0	302.0	0.0	14.2	0.1	6.5	0.0
1970	69.0	0.0	103.0	17.0	14.5	3.0	10.5	0.0
1971	8.0	0.0	205.0	90.0	30.0	5.2	7.0	0.0
1972	2.5	4.5	4.4	13.0	0.6	0.6	0.2	0.0
1973	1.6	1.0	43.8	17.2	7.5	0.3	0.8	0.2
1974	62.8	5.1	3.9	22.3	2.1	0.3	1.7	0.0
1975	21.0	4.5	96.0	24.5	9.8	0.0	4.5	0.0
1976	70.3	13.4	17.3	22.1	7.0	1.1	9.3	1.9
1977	78.5	0.0	236.0	36.0	18.3	0.8	5.7	0.1
1978	218.5	0.1	73.7	0.8	16.6	2.0	7.5	0.1
1979	50.2	2.0	90.0	32.0	9.6	0.4	7.1	1.0
1980	53.0	12.5	51.0	22.1	3.5	1.0	4.5	0.9
1981	84.9	3.0	117.0	28.0	10.0	4.6	6.7	0.8
1982	30.5	3.3	21.0	16.3	1.4	2.8	0.1	0.4
1983	17.8	0.5	12.2	7.2	1.2	1.1	0.8	0.0
1984	60.2	6.5	103.0	40.0	6.0	1.8	0.3	0.1
1985	3.5	0.5	49.6	23.3	5.9	1.7	0.3	0.0
1986	22.0	0.0	10.1	0.0	4.9	0.0	0.5	0.0
1987	13.4	0.4	14.8	2.4	6.6	1.0	0.0	0.0
1988	135.6	10.6	57.0	5.6	13.0	0.9	3.1	0.3
1989	2.9	1.5	32.0	0.8	10.8	0.6	1.7	0.1
1990	7.5	0.8	23.1	14.3	8.2	0.2	0.8	2.0
1991	53.6	0.0	42.2	3.1	0.0	4.9	0.0	1.7
1992	0.0	0.3	31.4	45.1	1.1	0.0	0.8	0.2
1993	16.1	0.0	17.3	1.7	6.1	0.0	0.3	0.3
1994	17.0	7.5	35.5	0.0	7.0	0.2	0.5	0.5

-Continued-

Table 48. (page 7 of 8)

Year	Portage 273-842 Pink	Portage 273-842 Chum	Seal Bay 273-843 Pink	Seal Bay 273-843 Chum	Kupreanof 275-401 Pink	Kupreanof 275-401 Chum	Smokey Hollow 275-402 Pink	Smokey Hollow 275-402 Chum
1953	5.3	0.5	2.0	2.0				
1954								
1955	0.0	20.0	0.0	0.6				
1956								
1957								
1958								
1959								
1960								
1961								
1962	0.0	23.8	0.0	1.8	12.2	0.0	3.6	3.9
1963	27.0	4.4	6.0	0.0	3.5	0.0	1.5	2.0
1964	0.0	20.4	1.3	0.0	13.0	1.1	0.8	17.0
1965	1.7	8.3	3.3	0.0	3.0	0.0	0.0	0.5
1966	24.4	8.9	4.0	0.0			0.0	7.4
1967	28.5	15.0	6.0	0.5	6.7	0.0	0.0	0.3
1968	3.3	5.0	2.5	0.0	14.0	0.0	0.0	0.9
1969	0.1	27.5	7.5	0.0	6.8	0.2	0.0	0.2
1970	9.0	27.6	5.2	0.0	11.0	0.0	0.0	2.5
1971	10.2	60.1	5.0	10.1	3.5	0.0	0.0	1.5
1972	0.1	21.4	0.0	11.1	1.0	0.5	0.0	2.0
1973	2.9	18.1	2.0	0.1	0.2	0.5	0.2	0.6
1974	0.0	8.7	1.2	1.0	1.2	0.5	0.4	0.8
1975	0.4	9.2	5.3	2.3	1.0	0.1	0.1	0.1
1976	0.9	8.5	0.6	4.6	4.0	0.0	0.6	0.8
1977	5.0	20.5	3.1	5.2	5.1	0.0	2.3	1.6
1978	4.1	19.0	1.5	1.4	16.1	0.0	0.5	0.5
1979	17.7	4.5	0.2	0.6	28.0	0.0	0.6	0.4
1980	10.2	18.5	1.0	0.5	11.6	0.0	0.5	0.3
1981	6.5	33.3	9.0	0.0	22.5	0.1	1.5	0.0
1982	0.0	6.3	0.0	3.5	5.5	0.0	0.0	0.0
1983	0.3	7.3	0.8	0.0	3.5	0.0	0.2	2.6
1984	1.0	14.6	4.6	5.5	5.2	0.0	0.3	1.4
1985	0.0	9.1	7.3	0.0			0.2	0.0
1986	0.7	5.0	0.0	0.1			0.5	0.1
1987	0.0	10.2	0.5	3.9			1.4	0.1
1988	4.0	6.1	0.0	0.8	5.1	0.0	0.9	1.0
1989	1.2	1.6	1.7	0.8	4.2	0.1	9.4	0.1
1990	0.9	8.9	0.0	2.2	13.5	0.0	1.3	1.5
1991	0.0	22.0	0.0	3.4	7.1	0.0	0.0	10.0
1992	2.5	5.3	1.5	2.0	28.8	0.0	1.2	0.8
1993	0.0	10.6	1.0	1.3	10.0	0.0	0.0	7.3
1994	17.3	6.0	5.0	3.0	9.4	0.0	1.6	3.5

-Continued-

Table 48. (page 8 of 8)

Stream	Wasco's Cr. 275-404		Ivanof River 275-406		Humpback Cr. 275-502	
Year	Pink	Chum	Pink	Chum	Pink	Chum
1953						
1954						
1955						
1956						
1957						
1958						
1959						
1960						
1961						
1962	23.0	0.0	48.5	2.5	64.5	3.0
1963	1.0	0.0	128.0	4.0	26.4	0.4
1964	0.0	6.5	15.0	0.8	40.7	0.2
1965	2.0	0.0	61.4	5.5	13.8	0.0
1966	10.5	0.0	39.5	9.0	30.0	0.0
1967	2.0	0.0	98.5	3.0	36.7	0.0
1968	0.3	0.0	60.0	0.5	52.3	0.0
1969	4.0	0.0	122.4	0.5	75.0	0.0
1970	2.5	0.0	51.0	10.0	31.0	0.0
1971	3.0	4.0	25.0	21.0	13.4	1.5
1972	0.3	0.0	6.3	7.8	0.5	1.0
1973	0.0	0.0	24.7	8.2	6.1	0.6
1974	6.3	1.9	41.9	8.1	10.2	0.7
1975	0.9	0.0	33.4	15.0	9.2	3.5
1976	6.2	0.2	55.0	6.8	20.3	0.7
1977	1.6	0.5	51.8	9.0	48.2	1.2
1978	9.7	0.0	71.5	4.2	51.0	0.2
1979	2.0	0.1	89.0	7.1	59.0	5.0
1980	0.0	3.0	40.5	22.7	18.7	3.1
1981	0.0	0.2	39.9	17.0	46.5	2.0
1982	0.1	2.3	2.7	9.4	4.8	11.0
1983	2.0	0.0	34.3	5.6	17.8	0.0
1984	14.6	1.4	61.0	42.5	18.3	0.7
1985	0.3	0.0	181.6	10.6	36.8	0.3
1986	10.0	0.0	150.0	7.6	12.0	0.0
1987	11.9	0.1	24.7	6.9	15.5	0.8
1988	14.0	1.1	126.0	30.6	30.8	0.4
1989	3.8	0.3	161.0	4.0	51.0	0.5
1990	0.5	4.4	47.3	33.7	7.4	0.5
1991	0.0	0.1	118.3	332.9	28.8	0.0
1992	9.0	0.0	109.3	285.8	36.1	2.3
1993	0.0	1.0	230.2	22.7	96.9	4.8
1994	2.1	0.0	74.2	120.2	40.0	2.0

[a]Escapement from 1953-1984 are based on index estimates described by Shaul and Schwarz (1989) and from 1985-1994 estimates are based on area-under-the-curve methodology described by Johnson and Barrett (1988).

[b]September 15 was assumed to be last day of entry.

Table 49. Estimated subsistence harvests of salmon, Chignik Management Area, 1976 - 1994.[a]

Year	Number of Permits Issued	Number of Permits Returned	Percentage Returned	Estimated Number Fished	Percentage Fished	Estimated Harvests Chinook	Sockeye	Coho	Pink	Chum	Total
1976						100	6,000	1,500	500	150	8,250
1977						50	9,700	2,400	1,800	600	14,550
1978						50	6,000	500	2,100	600	9,250
1979						14	7,750	34	262	0	8,060
1980	82	37	45.1%	75	91.9%	6	12,475	32	478	169	13,160
1981	29	7	24.1%	29	100.0%	0	2,049	0	0	0	2,049
1982	59	15	25.4%	59	100.0%	3	8,532	12	2	0	8,548
1983	32	21	65.6%	29	90.5%	0	3,078	1,319	1,250	850	6,497
1984	77	64	83.1%	57	73.4%	23	8,747	464	330	204	9,768
1985	59	48	81.4%	49	83.3%	1	7,177	50	26	25	7,279
1986	74	38	51.4%	74	100.0%	4	10,347	205	98	77	10,730
1987	NA	NA	NA	NA	NA	10	7,021	278	204	261	7,774
1988	80	34	42.5%	80	100.0%	9	9,073	1,455	54	142	10,733
1989	68	23	33.8%	62	91.3%	24	7,959	325	73	144	8,526
1990	72	23	31.9%	69	95.7%	103	8,099	210	470	115	8,996
1991	95	58	61.1%	84	87.9%	42	11,483	13	275	81	11,893
1992	98	19	19.4%	88	89.5%	55	8,648	709	305	145	9,862
1993	202	141	69.8%	168	83.0%	122	14,710	3,765	1,265	642	20,503
1994	219	122	55.7%	167	76.2%	165	13,978	4,055	1,720	382	20,300
Aver.	83	43	52.2%	78	93.6%	39	8,141	866	561	229	9,836

[a] In 1993, the Division of Subsistence, ADF&G, obtained copies of all available subsistence permits for the Chignik Management Area from the Division of Commercial Fisheries archive in Kodiak. Permits issued prior to 1980 and for 1987 could not be located. All permit data were entered into a data base. The estimated harvests reported in this table differ slightly from that reported in earlier annual management reports for several reasons. There are small discrepancies in some years for the number of permits issued or returned. Estimated harvests in earlier annual management reports were based on a simple expansion from harvests reported on returned permits to the total number of permits issued. Harvest estimates in this table are based on the sum of expanded community harvest estimates, similar to the method used in the Bristol Bay and Alaska Peninsula Management Areas.

Since 1993, the Division of Subsistence has been responsible for permit data entry and harvest estimates for the Chignik Management Area. Increases in permits issued beginning in 1993, and consequently higher harvest estimates, reflect the use of local vendors to issue permits and post-season surveys by department staff and local research assistants.

Sources: Quimby and Owen 1994:90, for 1976 - 1979 and 1987; Division of Subsistence, ADF&G, Chignik Subsistence Salmon Permit Database, Anchorage, for the remaining years.

Figure 1. Map of the Alaska Peninsula illustrating the relative location of the Chignik Management Area.

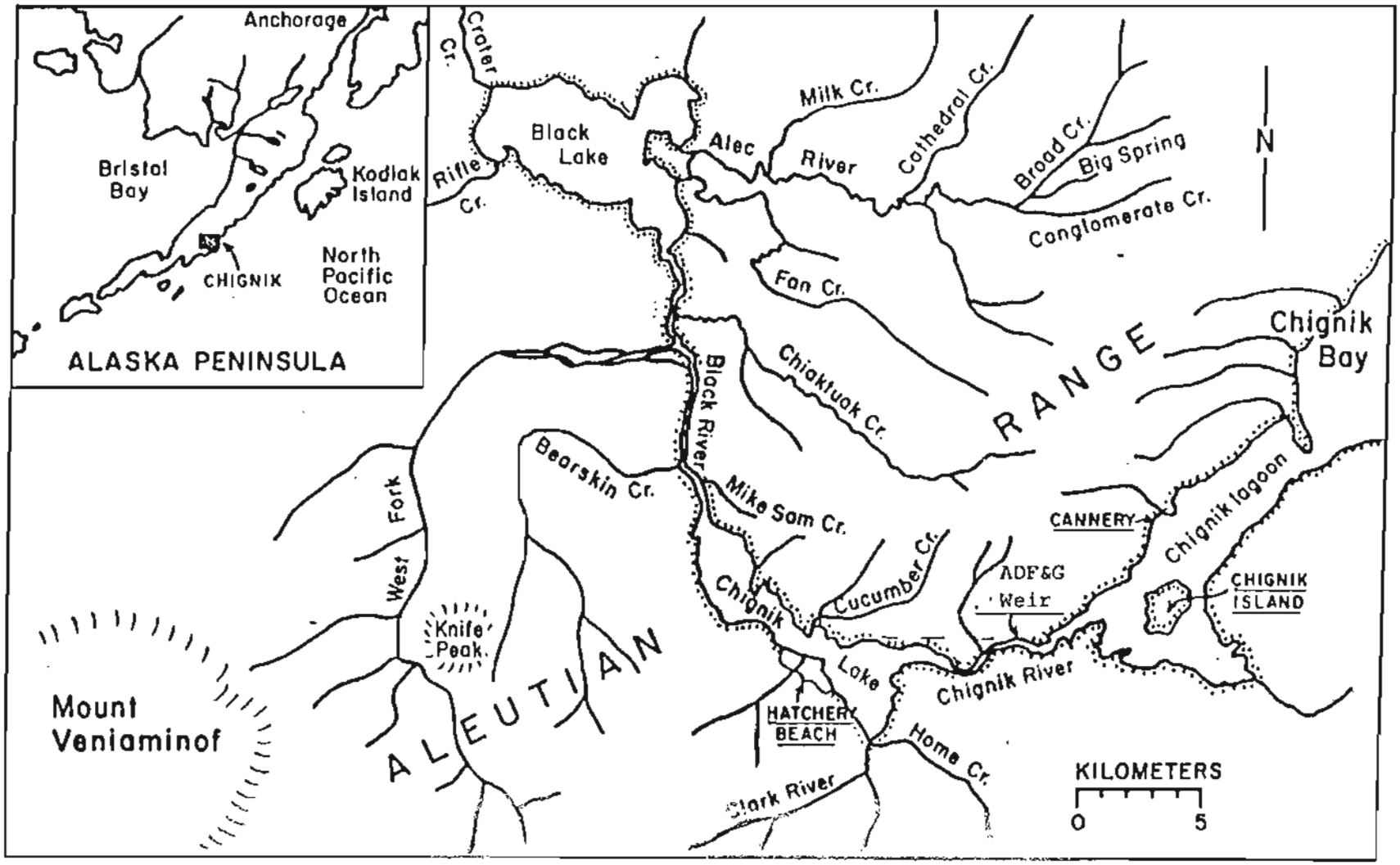


Figure 2. Map of the Chignik River watershed with inset of western Alaska, 1994.

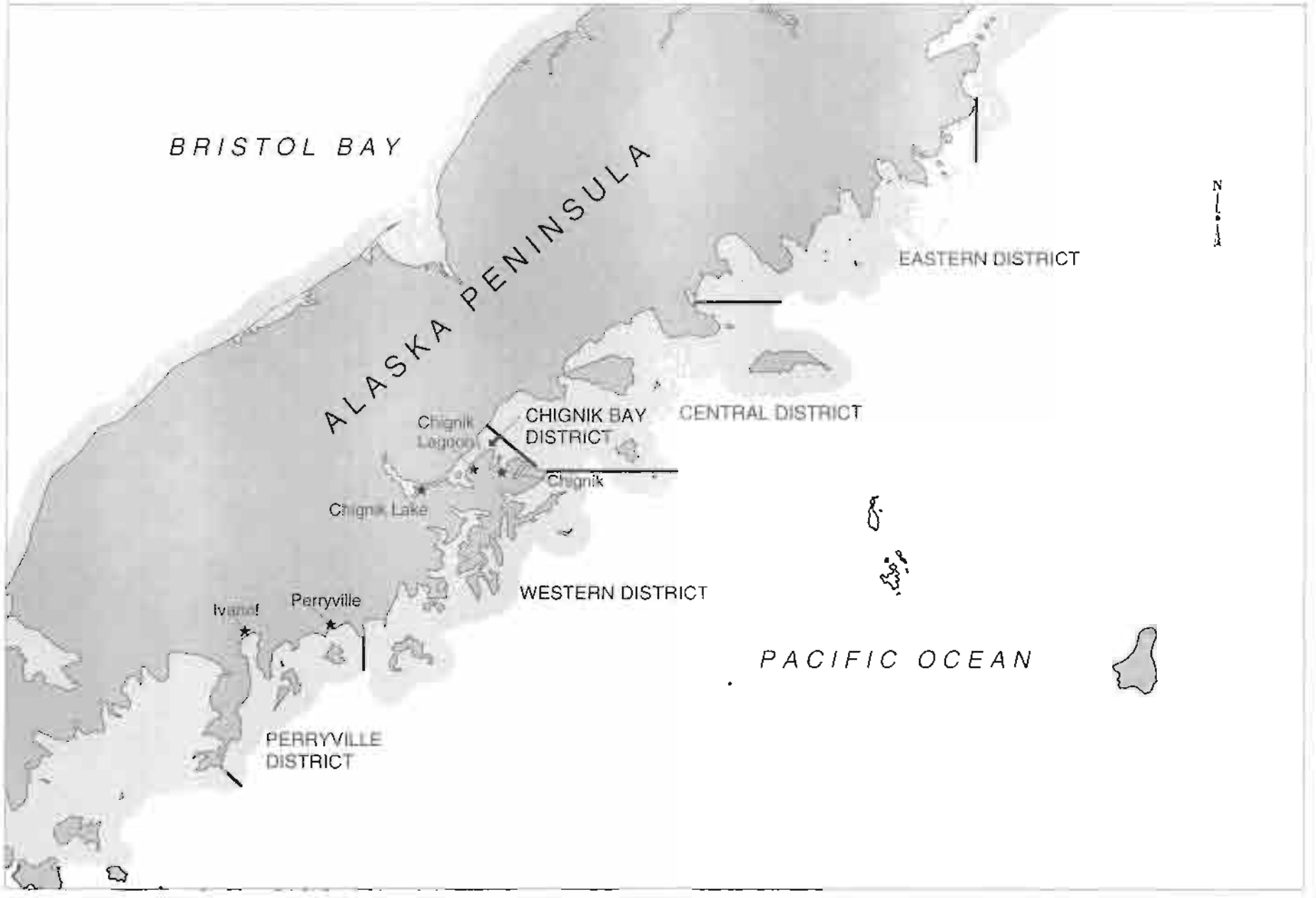


Figure 3. Map illustrating district boundaries and village locations within the Chignik Management Area.

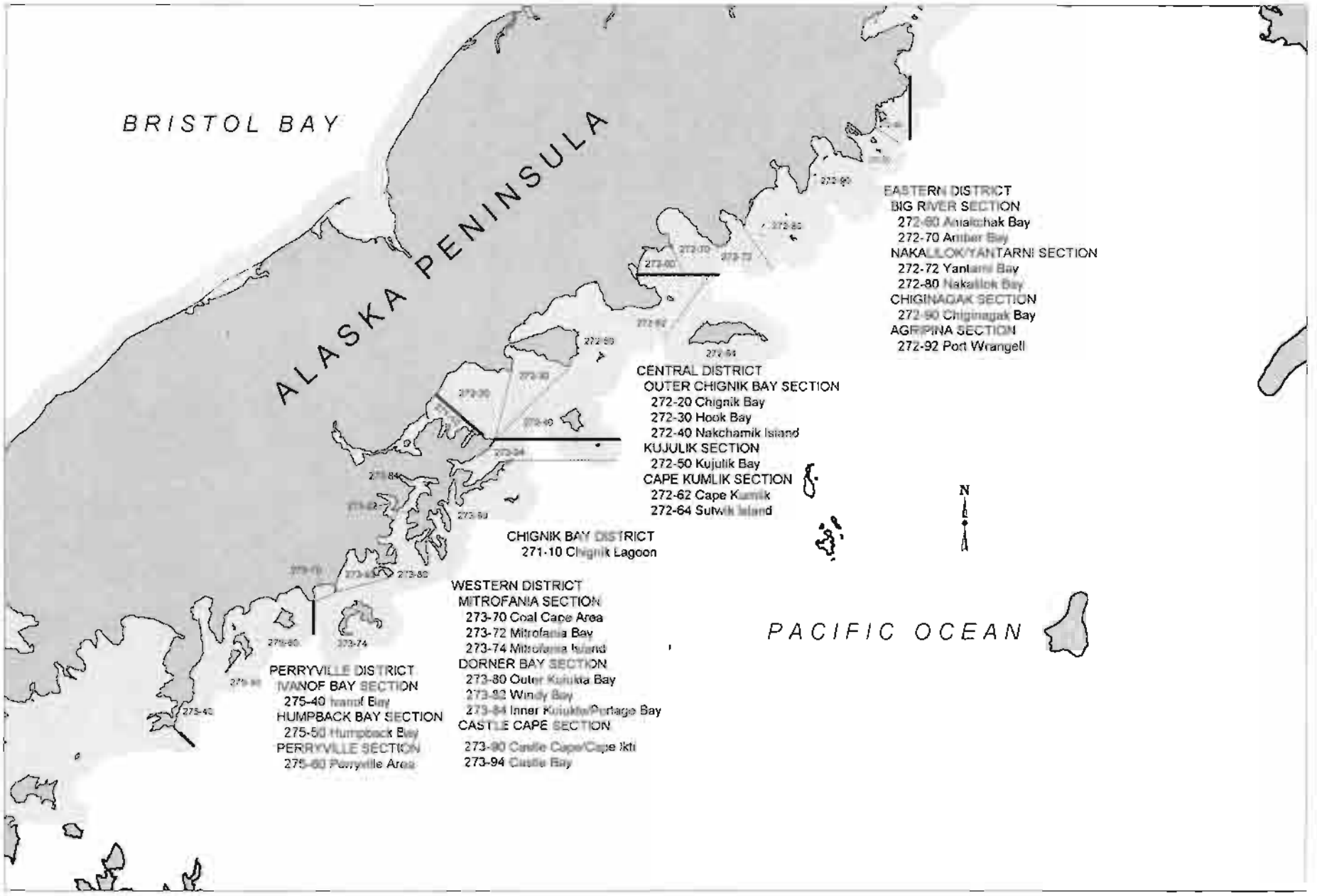


Figure 4. Map of Chignik Management Area with the statistical fishing districts and some prominent locatons identified.

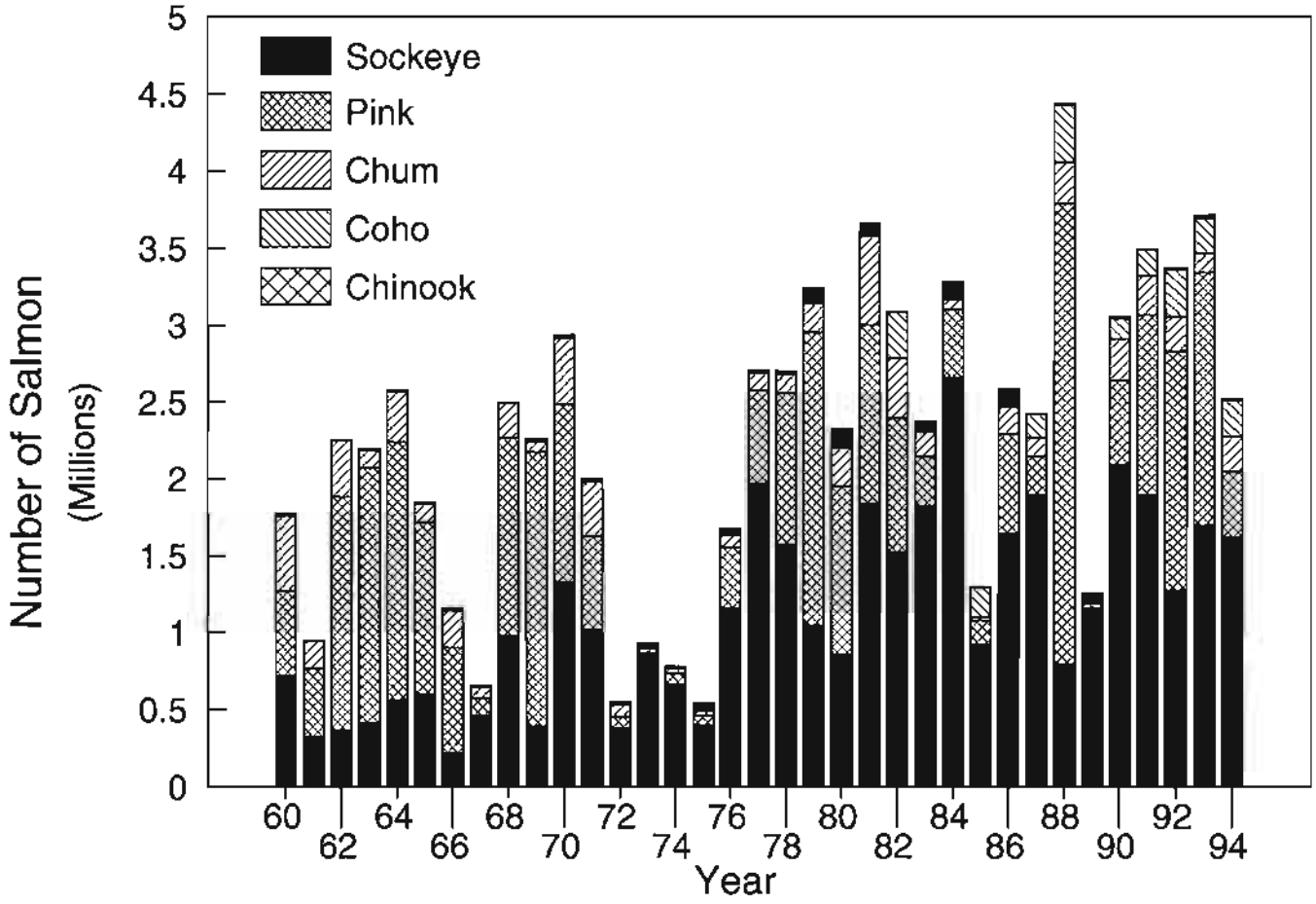
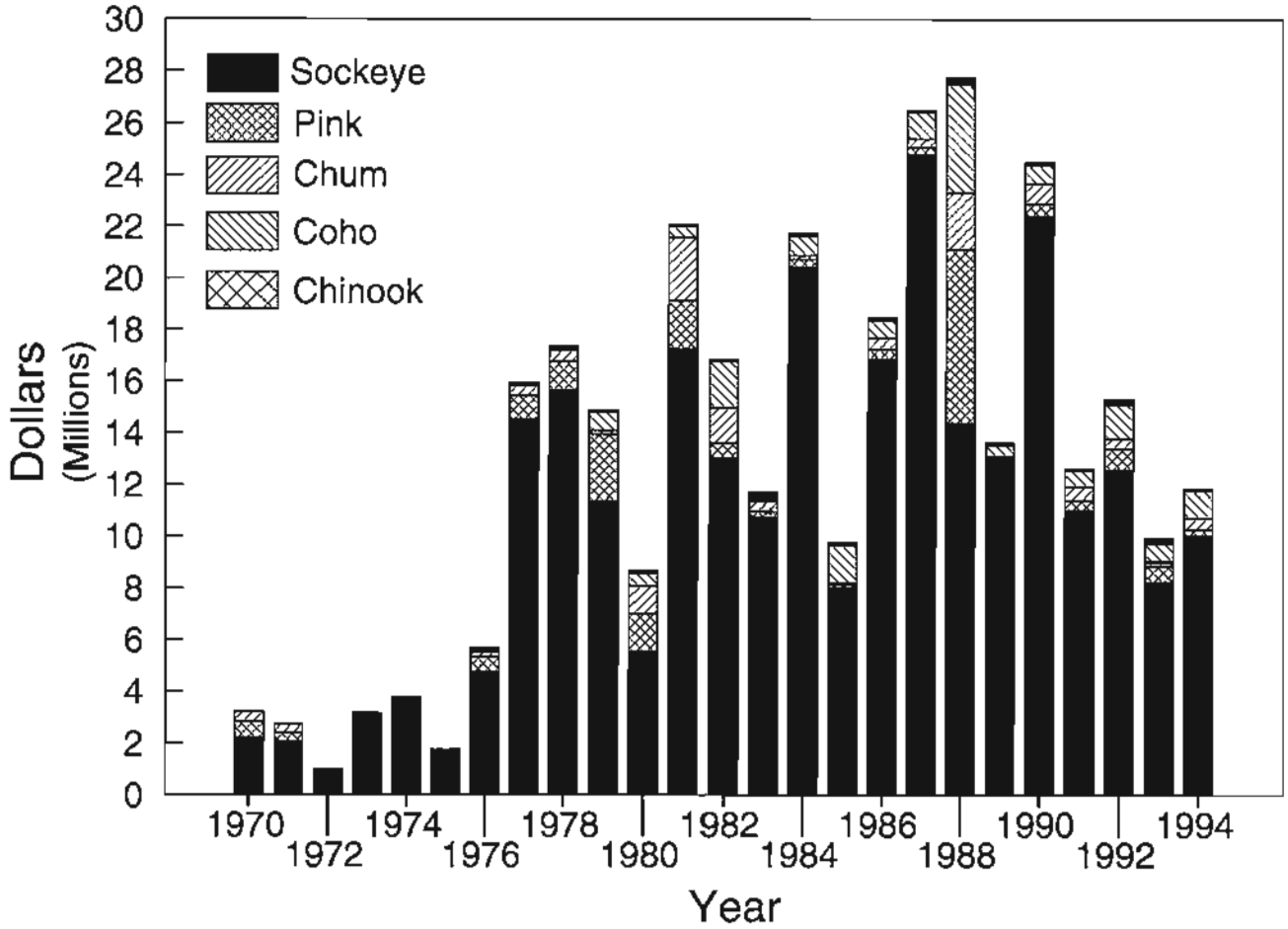


Figure 5. Total salmon harvests by species in the Chignik Management Area, 1960 - 1994.



Figue 6. Exvessel value of the salmon harvest in the Chignik Management Area, 1970 - 1994.

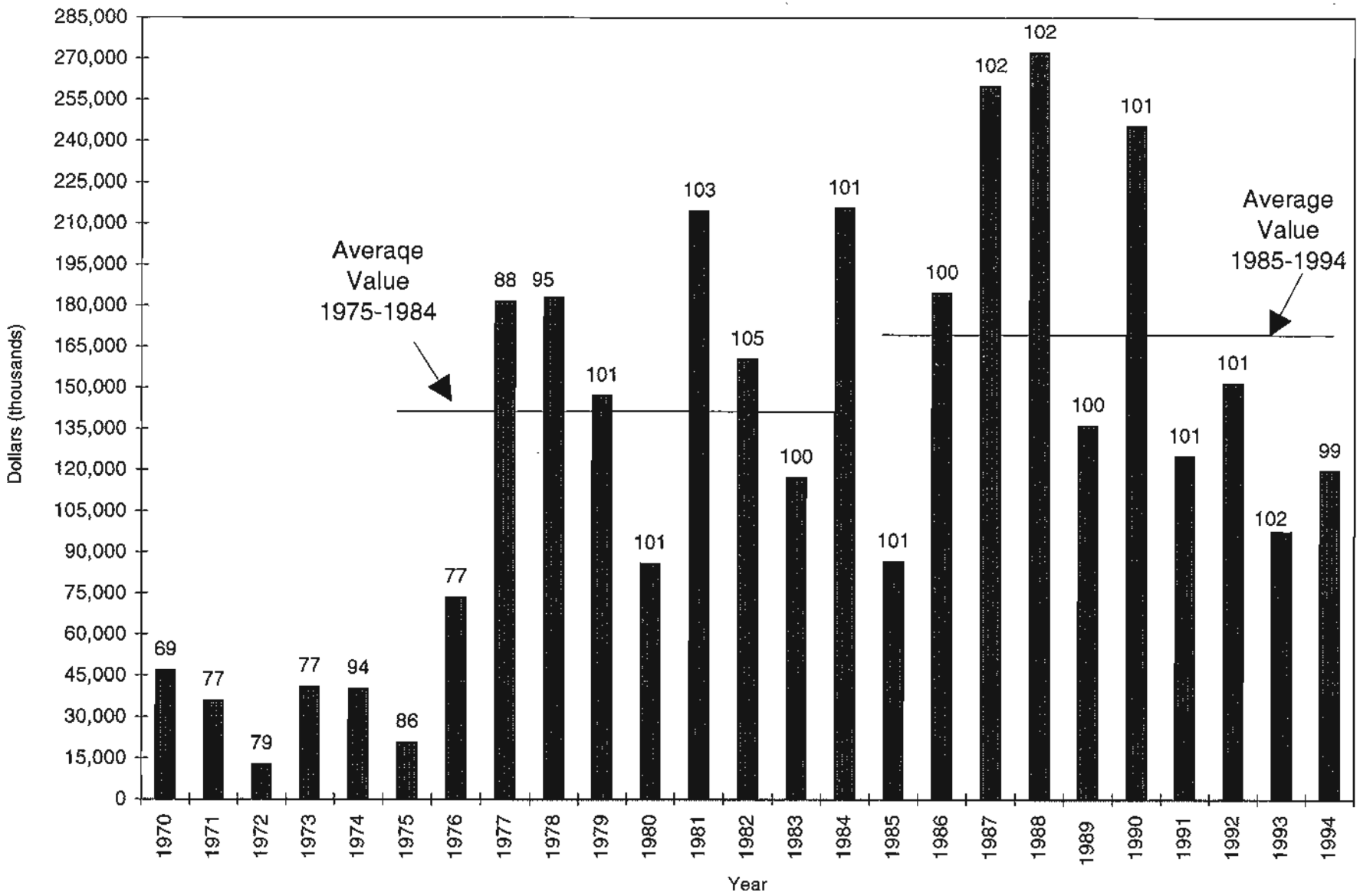


Figure 7. Average economic value of salmon per Chignik Management Area permit holder, 1970 - 1994. Number above bar represents permits fished that year.

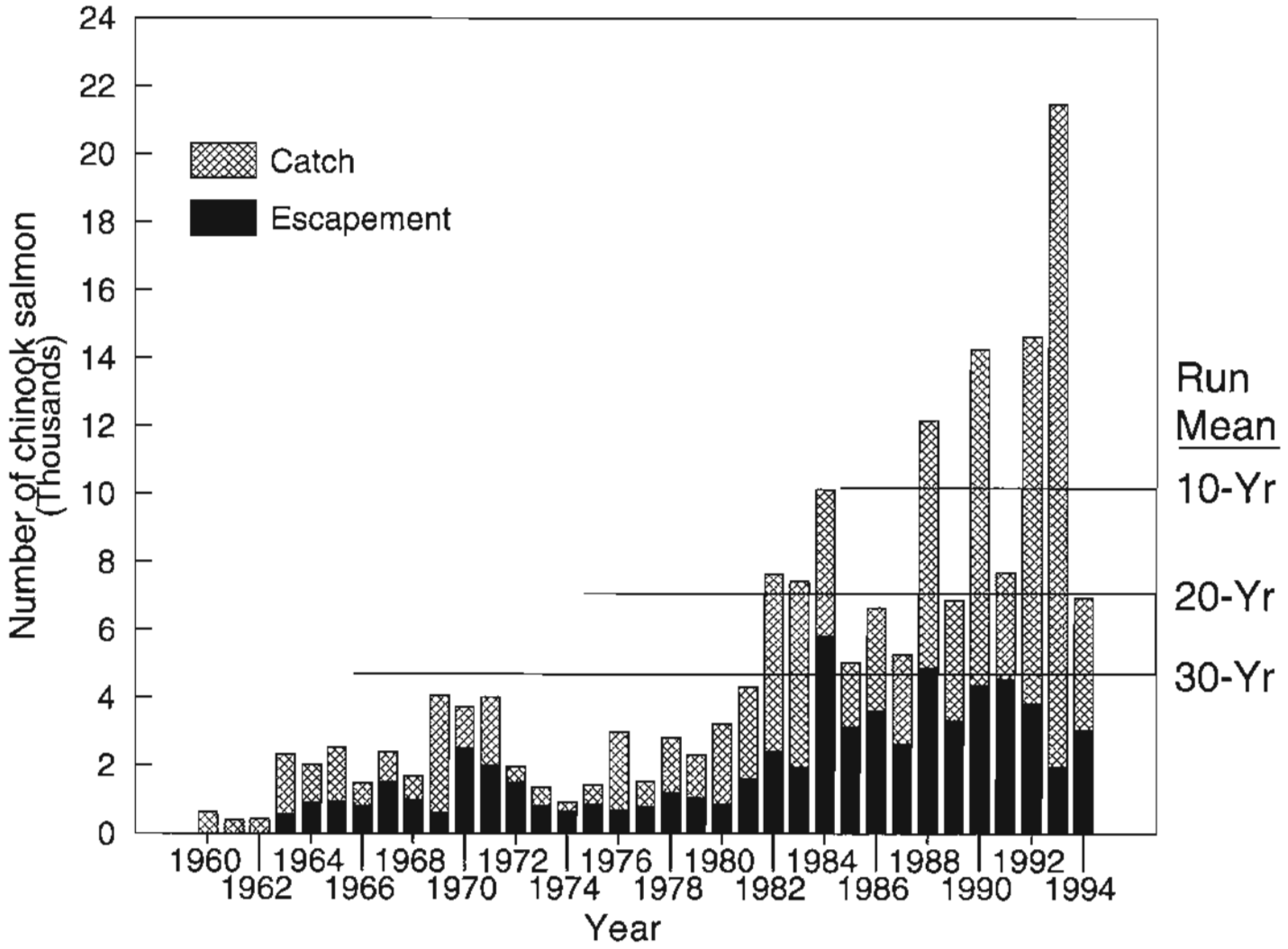


Figure 8. Chinook salmon catch and escapement in the Chignik Management Area, 1960 - 1994.

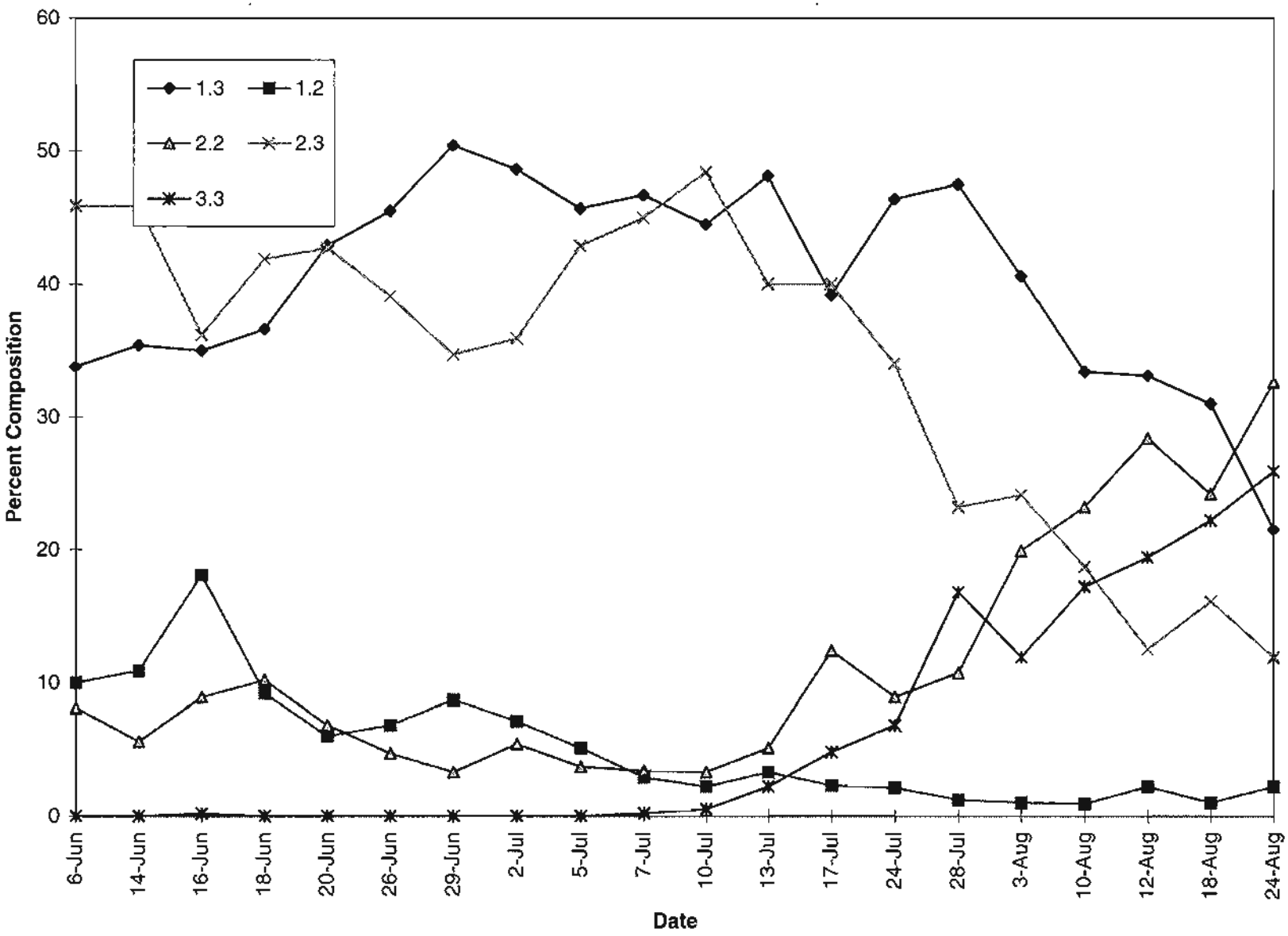


Figure 9. Age composition of sockeye salmon sampled in the Chignik Lagoon fishery, 1994.

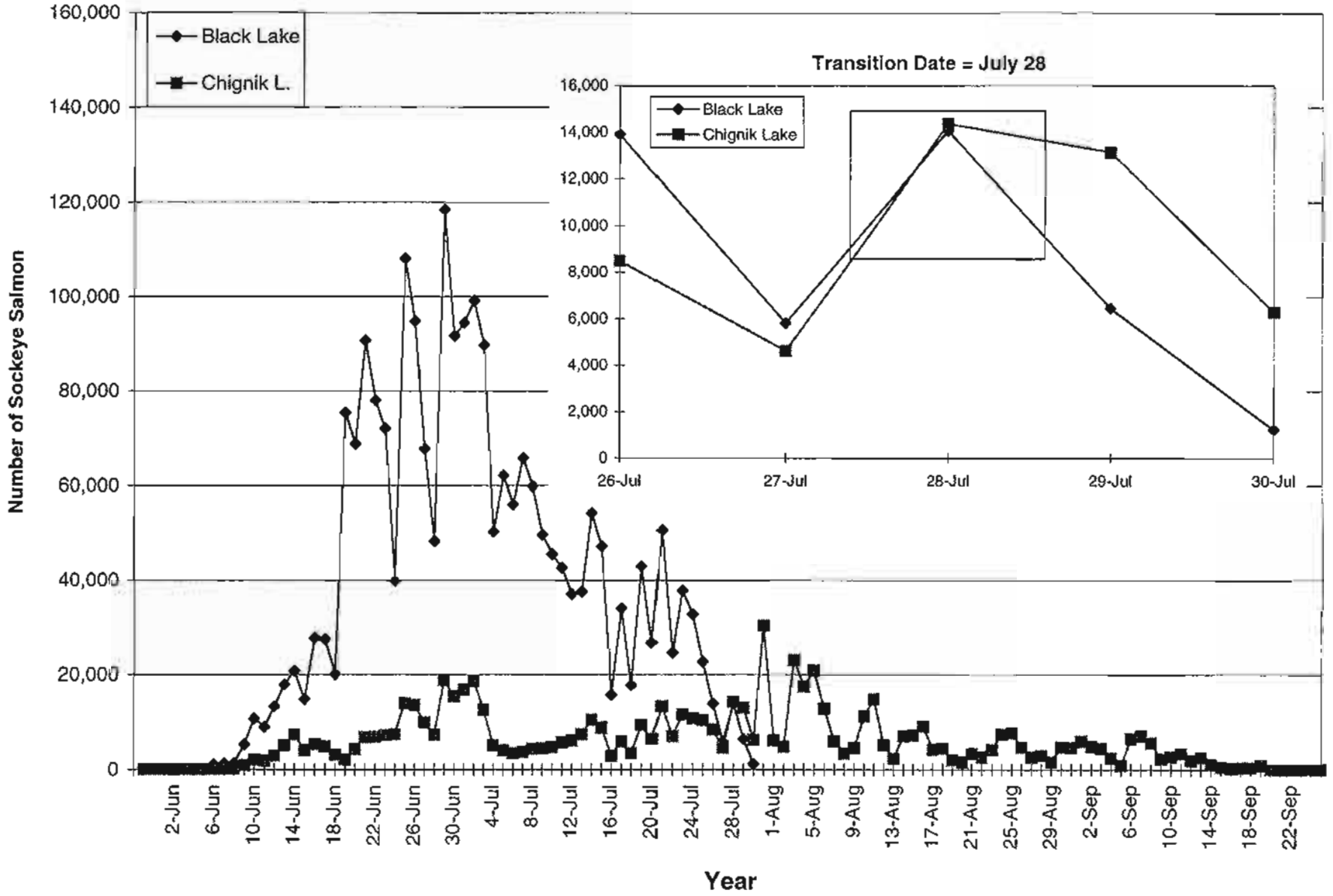
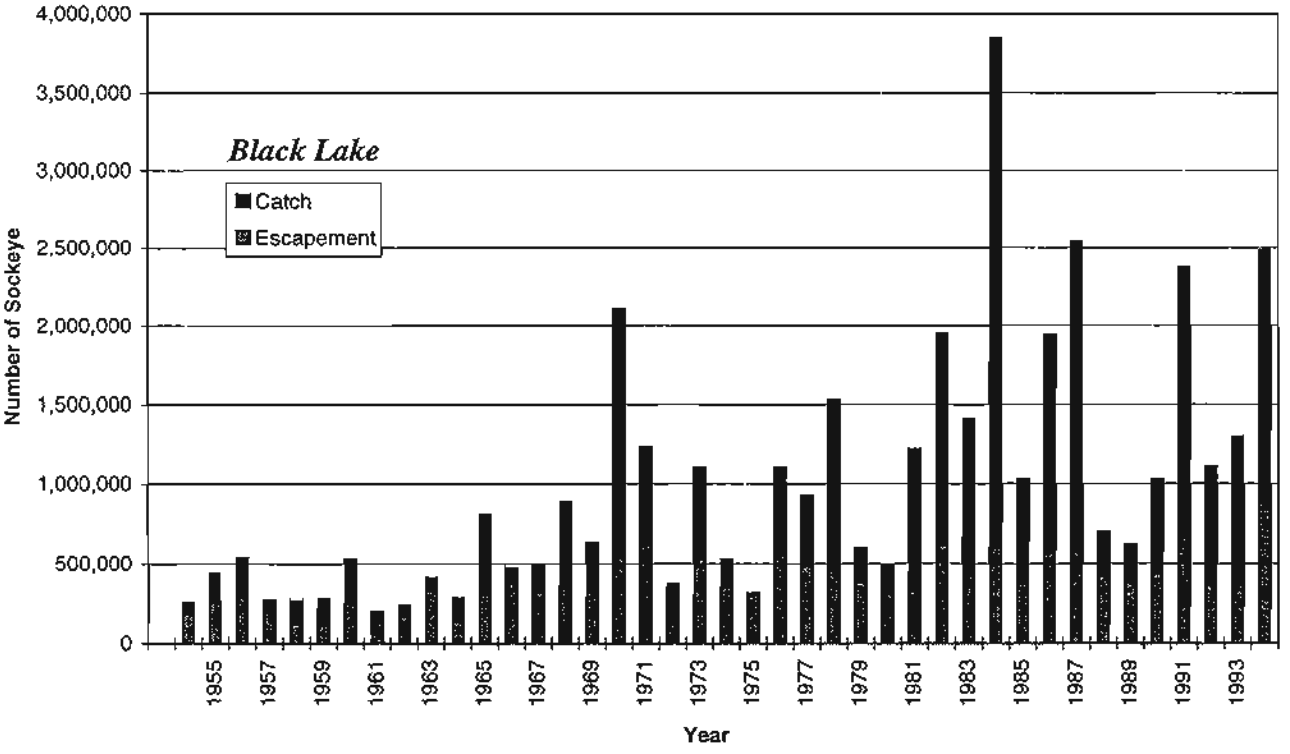


Figure 10. Daily sockeye run by stock to the Chignik Lake system as estimated by scale pattern analysis, 1994.



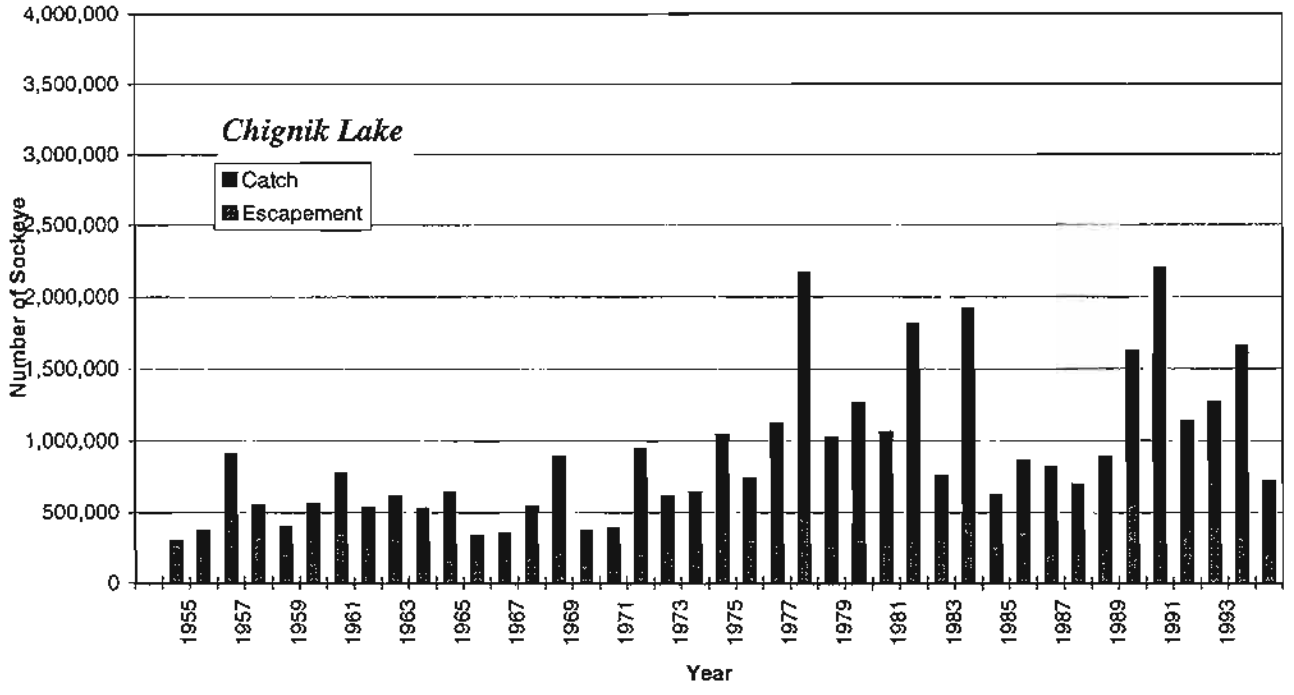


Figure 11. Black and Chignik Lake sockeye catch and escapement, 1954-1994.

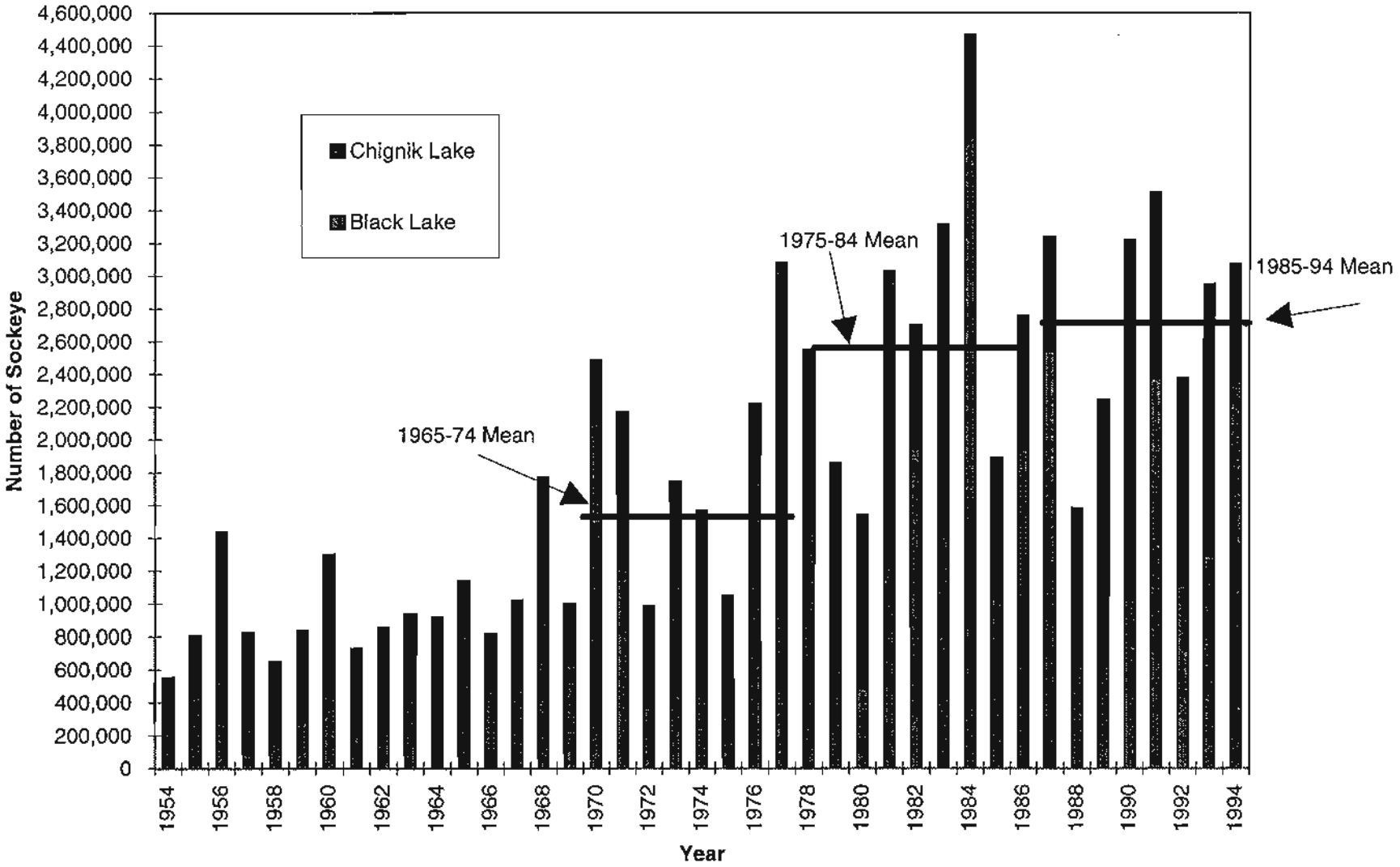


Figure 12. Total sockeye salmon runs to Black and Chignik Lakes, 1954-1994.

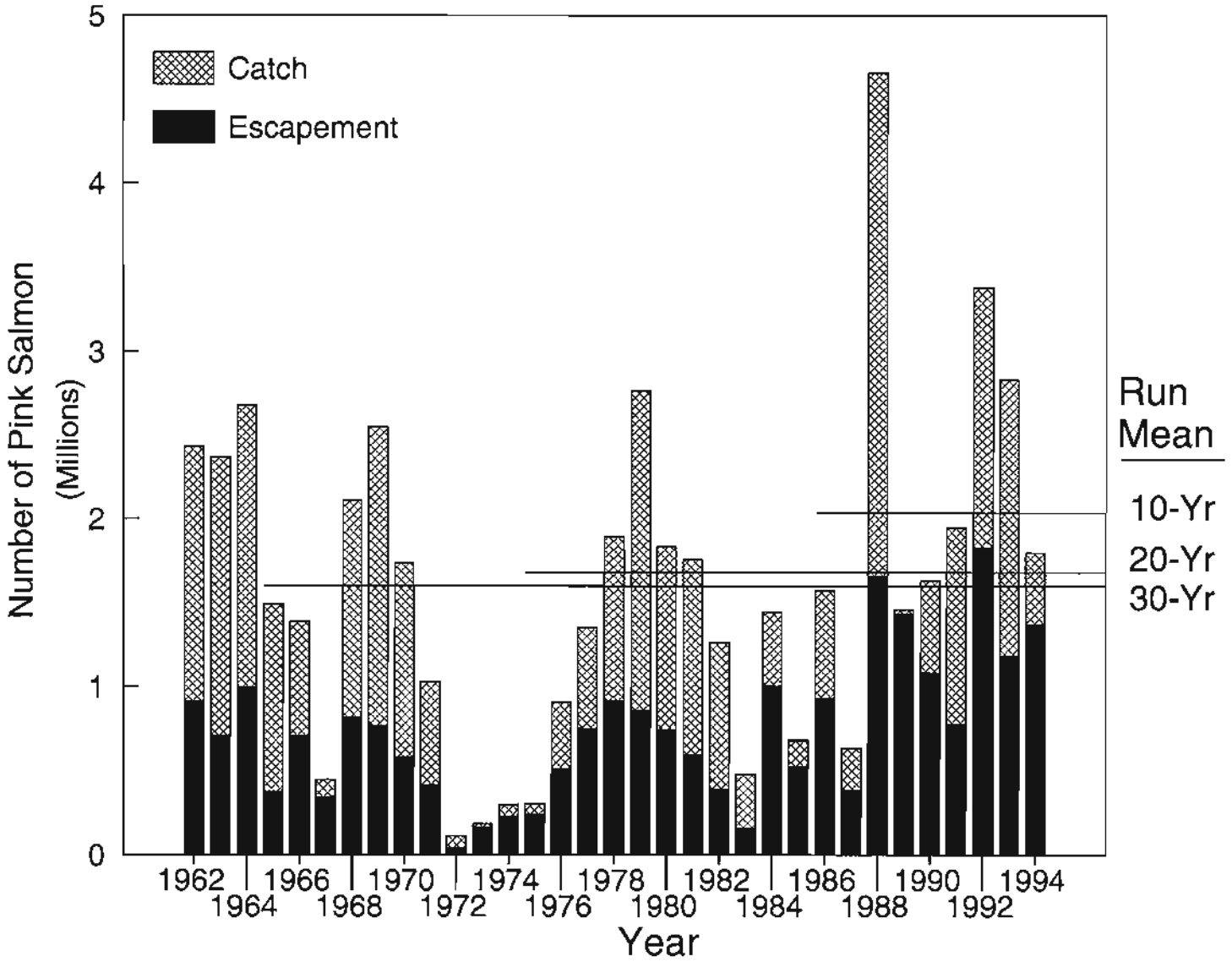


Figure 13. Pink salmon catch and escapement in the Chignik Management Area, 1962-1994.

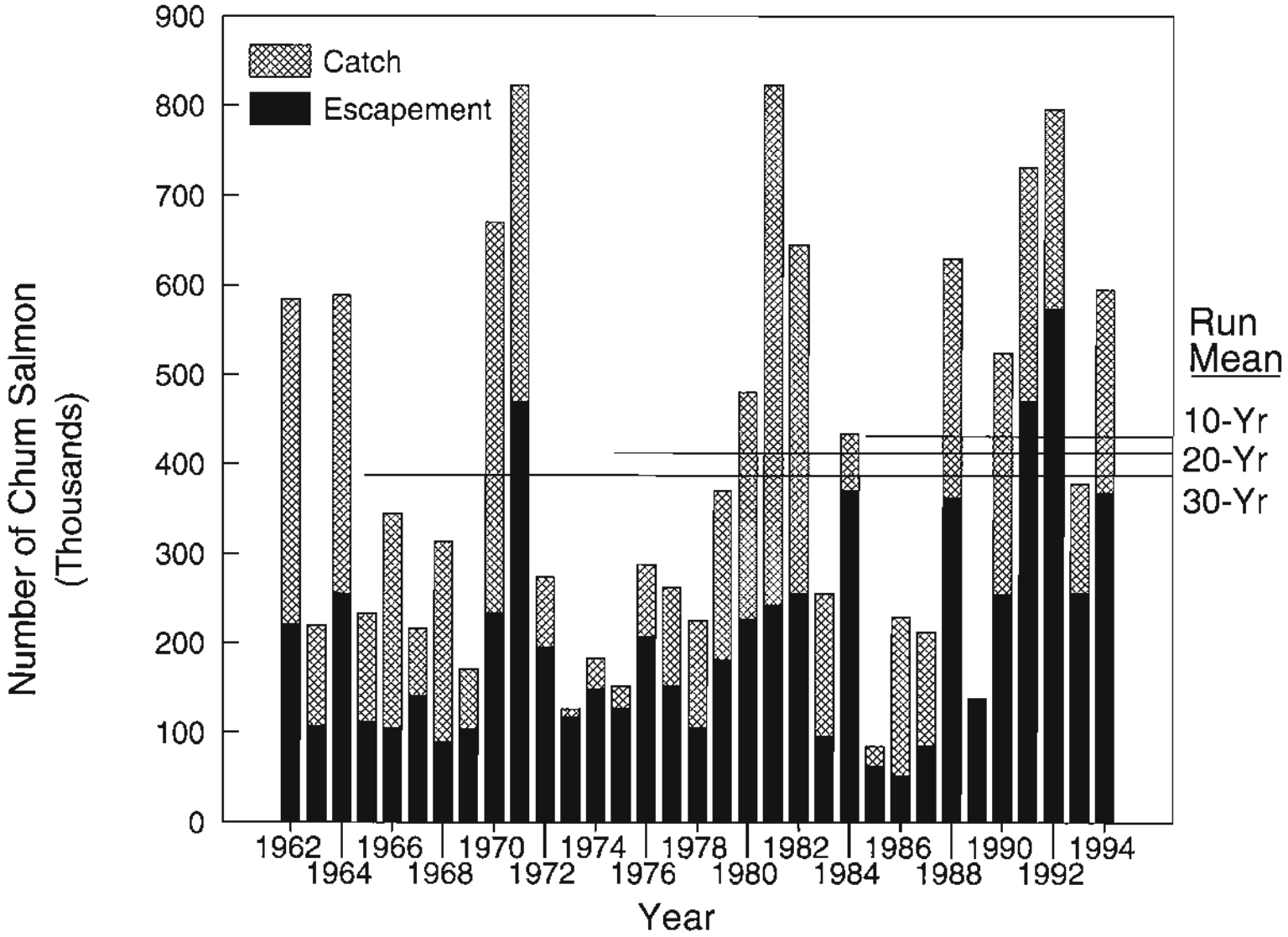


Figure 14. Chum salmon catch and escapement in the Chignik Management Area, 1962 - 1994.

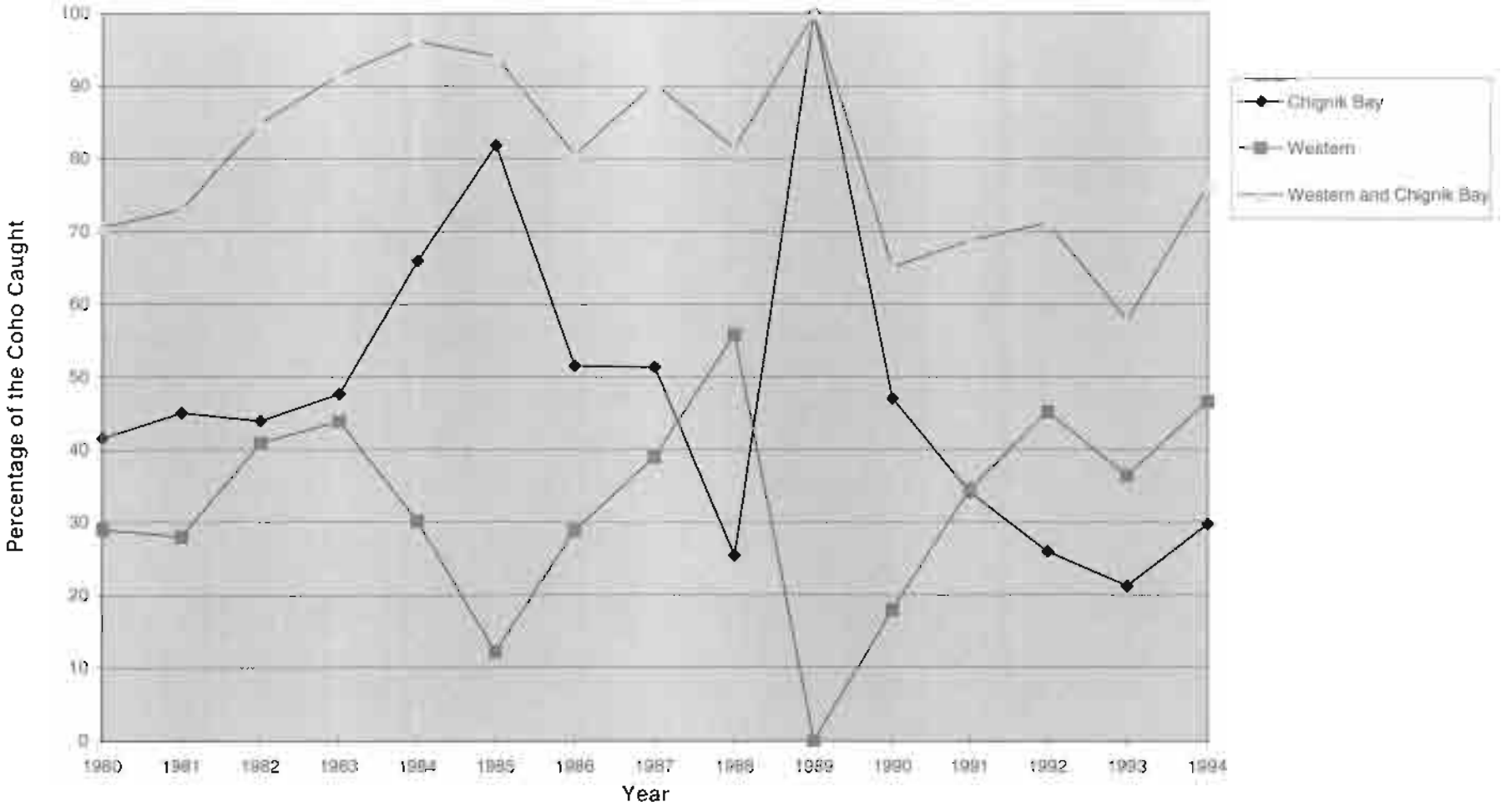


Figure 15. Percentage of coho caught in the Chignik Bay and Western Districts, 1980-1994.

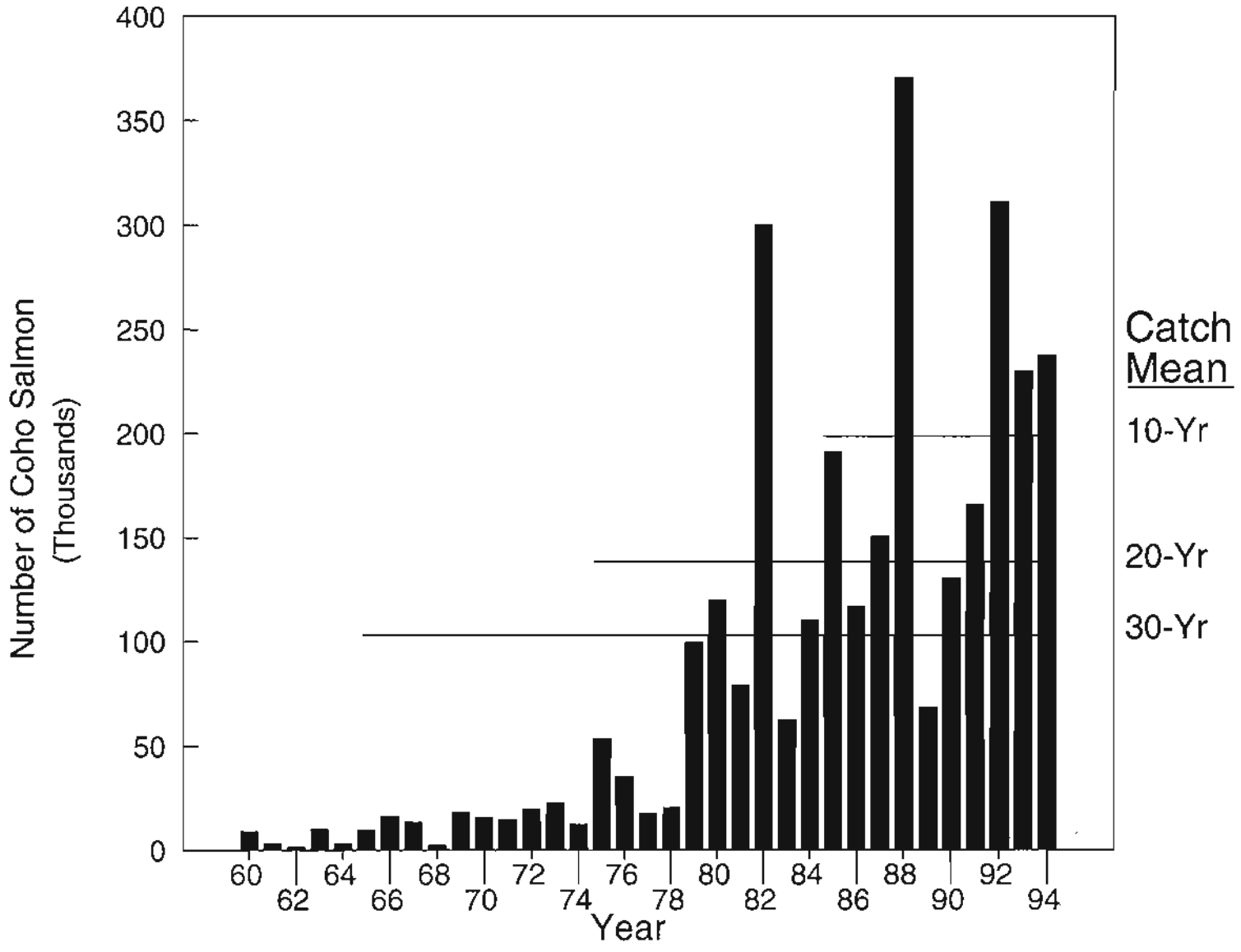


Figure 16. Coho salmon catches in the Chignik Management Area, 1960 - 1994.

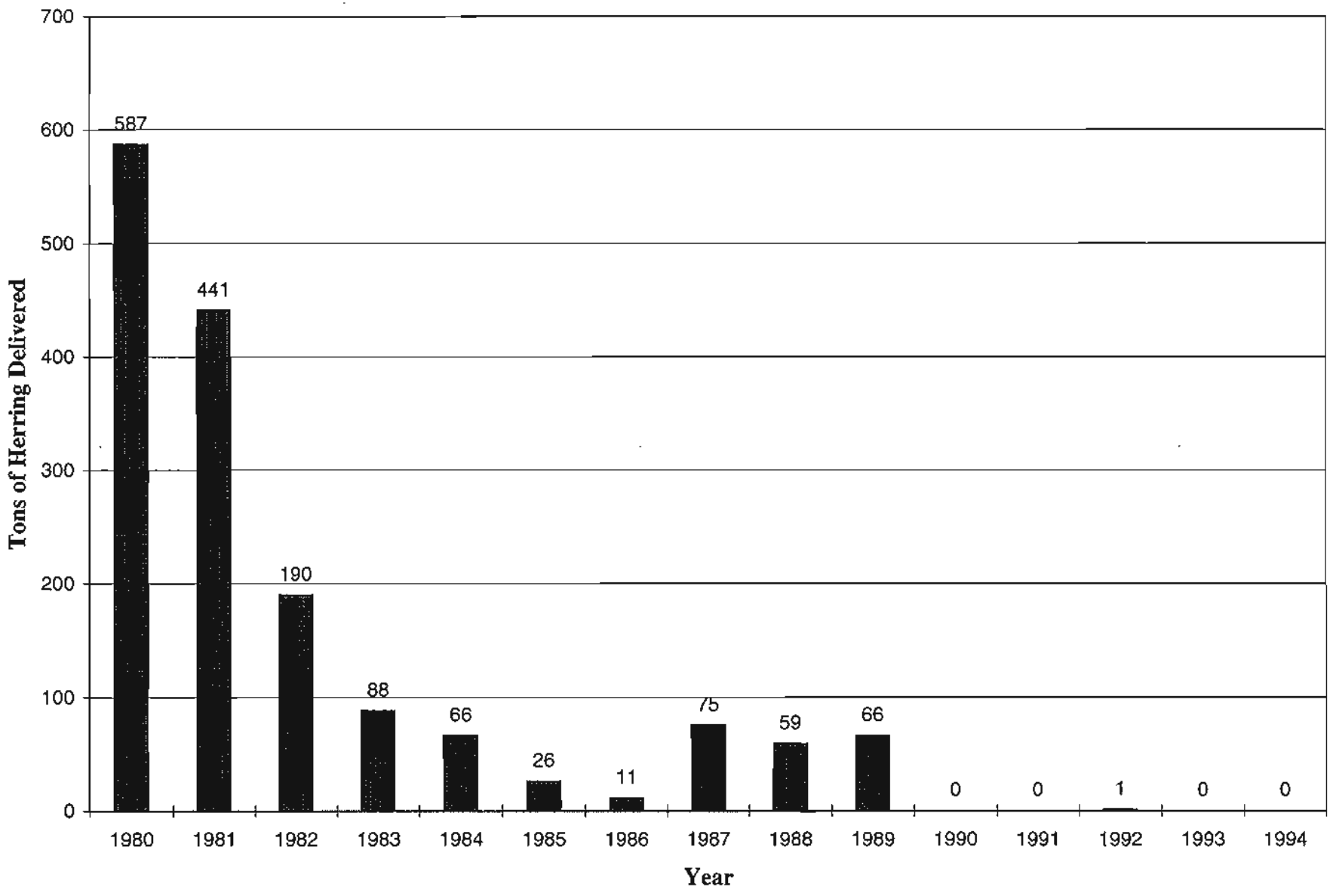


Figure 17. Herring harvests in the Chignik Management Area, 1980-1994.

APPENDIX

Appendix A.1. Chignik Management Area salmon forecasts, 1994.

FORECAST AREA: Chignik Management Area
Species: Sockeye salmon

PRELIMINARY FORECAST OF THE 1994 RUN

Early Run (Black Lake)	Point Estimate	80% Prediction Forecast Range
Total Run:	1,800,000	1,200,000 to 2,400,000
Escapement:	400,000	
Catch:	1,400,000	
Late Run (Chignik Lake)		
Total Run:	1,300,000	940,000 to 1,600,000
Escapement:	250,000	
Catch:	1,050,000	
Total Chignik Run		
Total Run:	3,100,000	2,140,000 to 4,000,000
Escapement:	650,000	
Catch:	2,450,000	

FORECAST METHODS:

The estimated run to Black Lake is the sum of a regression estimate for two major age classes (ages 1.3 and 2.3) and a 10-year average for minor age classes, while the Chignik Lake run is based on recruit per spawner relationships. The Black Lake forecast is based on the historical relationship between the number and length of prior year age 1.2 fish, and the parent year escapement number. All other age classes are predicted from a 10-year average. The Chignik Lake forecast accuracy has historically been quite variable, and developing a model such as the one used for the Black Lake run has been unsuccessful. The Chignik Lake run forecast for 1994 was derived using average return per spawner relationships for each year class for years post 1969.

DISCUSSION OF THE 1994 FORECAST:

Early Run

The 1994 Black Lake sockeye salmon run is expected to be 1.8 million fish. This is approximately 0.1 million fish more than the 1984-92 average run of 1.7 million fish and 200,000 fish more than the 1993 forecast. This above average run is expected because in 1993 age 1.2 fish were about 50% more abundant than the 10-year average.

-Continued-

Late Run

The estimated 1994 Chignik Lake sockeye run is 1.3 million fish, .2 million more than the 1983-92 average of 1.1 million fish. The Chignik Lake run forecast accuracy has historically been quite poor when compared to actual returns. The major returning year classes are primarily age 5 and 6 year olds. For the 5-year olds, the 1988 parent year escapement of 557,171 is 300,000 over the optimum of 250,000. Overescapements of this magnitude have historically resulted in low recruit per spawner relationships (<1). For the 6-year olds, the 1989 parent year escapement of 255,180 was close to the desired goal. Returns at this level have been variable; the post 1969 average of 2.8 per spawner.

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Chignik Management Area
1994 Harvest Projections
(in millions)

Chinook[a]	Sockeye[b]	Coho[c]	Pink[d]	Chum[e]	Total
007	1.9	0.2	1.3	0.2	3.6

[a] Chinook harvest is dependent upon the amount of fishing time allowed for sockeye salmon in July; the harvest projection approximates a 10-year average.

[b] Estimate does not include the Cape Igvak and Southeast Mainland District intercept fisheries (22% allocation) which equates to approximately 539,000 Chignik bound sockeye salmon through July 25.

[c] Coho salmon harvest is related to the strength of the Chignik Lake sockeye run. Lagoon and outside catches are based on a 10-year average.

[d] The pink salmon forecast is computed by multiplying the average recruit per spawner for the previous 10-years by the parent year escapement. The catch projection is driven by escapements to the Central/Eastern and Western/Perryville Districts. The largest pink catches should come from the Central/Eastern Districts and could account for 70% of the projected total.

[e] The chum salmon forecast is computed by multiplying the parent year escapement by an average recruit per spawner relationship based on escapements similar to that in 1990. Western/Perryville Districts should experience the largest proportion of the catch

Appendix A.2. Comparison of Black Lake (early run) and Chignik Lake (late run) forecasts versus actual runs in millions of sockeye salmon, 1987-1994.

	Early Run			Late Run			Combined Total Run		
Year	Forecast	Actual	Percent Difference	Forecast	Actual	Percent Difference	Forecast	Actual	Percent Difference
1987	1.8	2.5	-38.9	1.3	0.7	46.2	3.1	3.2	-3.2
1988	1.4	0.7	50.0	0.8	0.9	-12.5	2.2	1.6	27.3
1989	1.2	0.6	50.0	1.0	1.6	-60.0	2.2	2.2	0.0
1990	0.8	1.0	-25.0	1.0	2.2	-120.0	1.8	3.2	-77.8
1991	2.8	2.4	14.3	1.1	1.1	0.0	3.9	3.5	7.7
1992	1.8	1.1	38.9	0.9	1.3	-44.4	2.7	2.4	11.1
1993	1.6	1.3	18.8	1.0	1.7	-70.0	2.6	3.0	-15.4
1994	1.8	2.4	-33.3	1.3	0.7	46.2	3.1	3.1	0.0

Appendix B.1. Total sockeye return to Black Lake by brood year and age, 1915 - 1994.

Year	Parent Escapement	Age Composition 0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total	Return/ Spawner
1915												1,202	1,202		2,404	
1916									9,315	68,559	37	15	0		77,926	
1917							318,491	20,666	576	18,747	0	0	0	0	358,480	
1918				0	12,960	0	43,803	6,984	0	49,097	0	0	138	0	112,982	
1919		0	0	0	15,073	0	92,073	28,499	16	74,062	30	0	324	0	210,077	
1920		0	0	0	63,251	0	422,288	28,279	0	111,422	6,511	0	273	0	632,024	
1921		0	0	0	122,550	0	258,628	113,493	5,873	255,927	0	0	0	0	756,471	
1922	86,421	0	0	0	40,685	0	659,040	56,121	0	202,612	2,465	1,222	1,669	0	963,814	11.2
1923	4,642	0	0	0	18,213	0	172,343	53,445	2,677	132,776	410	436	59	0	380,359	81.9
1924	121,983	0	0	0	85,083	0	1,206,555	8,855	426	19,931	939	384	384	0	1,322,557	10.8
1925	386,364	0	0	0	1,529	0	54,164	9,924	384	50,707	937	17	0	0	117,662	0.3
1926	289,009	0	0	0	7,544	420	104,094	45,572	11,714	352,025	7,117	0	1,708	0	530,194	1.8
1927	857,881	0	0	0	99,929	66	2,375,878	85,253	721	107,239	165	3,699	4,234	0	2,677,184	3.1
1928	507,353	0	0	0	23,860	0	304,338	49,284	9,848	428,369	2,755	409	2,118	0	820,981	1.6
1929	995,832	0	0	0	9,910	0	918,487	58,777	5,626	60,214	865	144	144	0	1,054,167	1.1
1930	92,955	0	0	0	23,769	0	286,339	13,886	6,663	43,297	3,527	4	0	0	377,485	4.1
1931	96,201	0	0	0	33,685	943	923,763	46,710	28	122,389	0	655	58	0	1,128,231	11.7
1932	2,151,734	0	0	0	50,602	0	191,354	36,823	10,350	43,060	291	8,584	234	0	341,298	0.2
1933	223,913	0	0	0	62,079	0	247,818	7,609	138,675	164,540	0	625	54	0	621,400	2.8
1934	866,890	0	0	0	16,228	4	1,583,632	6,057	9,886	40,971	276	1,299	113	0	1,658,466	1.9
1935	194,636	0	10	0	68,710	0	235,971	7,188	20,562	85,058	572	1,508	130	0	419,709	2.2
1936	548,039	0	0	0	15,422	3	490,061	14,873	23,865	98,553	661	2,346	201	0	645,985	1.2
1937	205,613	0	9	0	32,001	7	567,984	17,179	37,146	153,156	1,026	960	82	0	809,550	3.9
1938	175,972	0	19	0	37,059	7	882,938	26,618	15,193	62,552	418	706	60	0	1,025,570	5.8
1939	1,142,852	0	22	0	57,563	12	360,712	10,840	11,171	45,926	307	2,470	209	0	489,232	0.4
1940	176,307	0	35	0	23,499	5	264,904	7,938	39,130	160,651	1,070	7,513	634	0	505,379	2.9
1941	374,420	0	14	0	17,246	3	926,890	27,697	119,048	488,137	3,247	1,196	101	0	1,583,579	4.2
1942	442,981	0	11	0	60,302	12	2,817,023	83,954	18,948	77,598	515	684	58	0	3,059,105	6.9
1943	701,859	0	36	0	183,156	37	447,919	13,315	10,839	44,522	297	499	38	0	700,658	1.0
1944	291,844	0	111	0	29,106	6	256,848	7,683	7,947	31,664	203	482	43	0	334,093	1.1
1945	217,882	0	18	0	16,715	3	183,734	5,143	7,619	31,784	216	275	27	0	245,534	1.1
1946	774,130	0	10	0	11,775	2	182,835	5,644	4,307	18,686	133	707	64	0	224,163	0.3
1947	2,386,733	0	7	0	11,988	2	106,718	3,550	11,150	46,809	320	525	43	0	181,112	0.1

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Year	Parent Escapement	Age Composition													Total	Return/ Spawner
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other		
1948	384,637	0	7	0	7,129	1	268,953	8,407	8,346	33,877	223	352	0	0	327,295	0.9
1949	213,269	0	4	0	17,688	4	195,878	5,713	0	89,095	0	0	152	0	308,534	1.4
1950	206,270	0	11	0	12,671	3	287,407	12,644	1,862	76,722	648	373	286	0	392,627	1.9
1951	125,126	0	8	0	46,798	0	448,360	3,404	2,319	124,345	0	455	0	0	625,689	5.0
1952	34,155	0	0	0	4,390	0	137,957	3,423	208	81,691	0	639	2,512	0	230,820	6.8
1953	168,375	0	0	0	1,024	32	154,589	17,848	1,625	180,887	252	0	1,350	0	357,607	2.1
1954	184,953	0	143	0	6,468	0	50,272	10,720	515	72,973	9	312	1,009	0	142,421	0.8
1955	256,757	0	783	0	30,302	0	430,793	3,476	339	88,693	109	0	0	0	554,495	2.2
1956	289,096	0	17	0	16,499	0	81,569	14,910	9	90,001	0	196	4,967	0	208,168	0.7
1957	192,479	0	0	0	6,559	161	117,979	10,507	52	210,686	3,641	21	906	0	350,512	1.8
1958	120,862	0	905	0	19,146	0	79,955	81,992	0	60,132	77	61	103	0	242,370	2.0
1959	112,226	0	1,522	0	31,039	142	148,403	13,872	402	144,581	874	58	54	0	340,947	3.0
1960	251,567	0	124	0	55,546	221	610,592	32,598	6,221	65,418	49	606	3,383	0	774,756	3.1
1961	140,714	0	276	0	14,301	1	387,053	3,483	536	164,278	486	1,020	209	0	571,645	4.1
1962	167,602	0	698	0	8,379	0	257,371	25,726	3,194	395,626	1,524	954	0	0	693,473	4.1
1963	332,536	0	0	0	29,538	173	448,298	17,628	905	199,104	0	2,506	551	0	698,703	2.1
1964	137,073	0	37	0	13,311	3,735	190,972	133,203	3,809	409,973	414	0	271	0	755,726	5.5
1965	307,192	0	394	0	102,570	421	1,535,858	80,851	3,332	201,220	271	497	22,731	0	1,948,144	6.3
1966	383,545	0	1,631	0	65,254	378	990,567	15,248	2,193	225,660	28	0	2,504	0	1,303,463	3.4
1967	328,000	0	2,728	0	16,157	163	99,357	6,078	13,406	96,629	1,537	0	0	0	236,054	0.7
1968	342,343	0	271	0	12,997	0	971,408	4,519	2,163	161,664	1,960	0	1,663	0	1,156,644	3.4
1969	366,589	0	0	0	12,747	153	279,429	63,258	1,313	84,120	486	0	2,251	0	443,757	1.2
1970	536,257	0	0	0	17,281	261	195,050	8,163	4,614	192,247	621	0	3,698	0	421,934	0.8
1971	671,668	0	569	0	22,138	0	800,515	67,483	3,873	454,039	385	264	6,763	0	1,356,029	2.0
1972	326,320	0	0	0	31,630	0	423,794	16,474	3,195	587,997	4,596	831	2,564	0	1,071,082	3.3
1973	533,047	0	0	0	19,627	0	753,970	121,231	0	324,538	1,425	511	1,812	0	1,223,113	2.3
1974	351,701	0	51	0	50,797	334	123,590	117,544	116	305,094	551	452	2,727	0	601,256	1.7
1975	308,914	0	0	0	19,977	1,826	71,732	55,434	1,010	447,233	1,057	396	34	2,437	601,137	1.9
1976	551,254	0	520	0	44,085	88	669,395	24,810	816	135,036	0	0	334	11,778	886,860	1.6
1977	482,247	0	102	0	59,211	389	1,687,898	12,701	6,990	337,281	0	3,492	1,655	44,852	2,154,571	4.5
1978	458,660	0	235	0	55,123	3,060	448,274	61,734	6,664	354,902	0	0	210	15,138	945,339	2.1
1979	385,694	0	1,241	0	533,050	671	3,195,846	57,155	4,133	68,046	223	422	805	1,350	3,862,941	10.0
1980	311,332	0	255	120,421	99,989	1,187	641,668	151,574	1,503	741,614	2,098	943	1,113	4,847	1,767,213	5.7

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Parent Year	Parent Escapement	Age Composition 0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total	Return/ Spawner
1981	438,540	0	532	0	155,923	1,112	938,072	75,567	4,289	664,383	510	1,112	259	2,819	1,844,578	4.2
1982	616,117	0	121	0	172,993	2,021	1,627,753	134,483	2,133	391,690	0	394	0	194	2,331,780	3.8
1983	426,177	0	0	19,136	79,674	3,905	209,772	37,475	285	211,457	2	3,596	0	466	565,767	1.3
1984	597,712	478	2,279	1,225	46,148	2,194	324,901	42,078	2,605	210,908	1,216	703	2,461	0	637,196	1.1
1985	377,516	156	501	510	36,677	638	376,202	73,568	20,665	249,837	1,091	1,202	9,240	3,500	773,787	2.0
1986	566,088	384	1,517	6,384	342,057	0	1,893,213	55,260	2,978	203,218	11,147	5,791	1,147	45	2,523,141	4.5
1987	589,291	2,325	0	961	145,616	1,027	727,158	75,666	8,944	433,856	2,904	6,072	31,613	745	1,436,887	2.4
1988	420,577	0	1,467	670	70,153	1,885	491,967	122,690	5,445	961,154	1,426			256	1,657,113	3.9
1989	384,004	32	4,416	5,832	213,429	2,749	1,035,809	143,882						1,452		
1990	434,543	1,004	557	34,085	137,435	5,125										
1991	657,511	720	520													
1992	360,681															
1993	364,263															
1994	766,909															

Appendix B.2 Total sockeye return to Chignik Lake by brood year and age, 1915-1994.

Year	Parent Esccapement	Age Compostion														Total	Return/ Spawner
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3	Other		
1915													4,514	4,514		9,028	
1916										11,874	690,450	9,120	2,007	0	0	713,451	
1917							339,637	149,163	0	296	274,036	0	0	0	0	763,132	
1918				0	44,358	0	201,318	195,611	0	0	999,888	0	2,948	2,966	0	1,447,089	
1919		0	0	0	100,404	2,425	243,024	286,119	0	2,492	423,094	8,270	0	5,828	0	1,071,656	
1920		0	0	0	148,914	0	435,826	137,704	0	2,509	300,319	20,713	0	1,567	0	1,047,552	
1921		0	0	0	101,251	0	216,728	278,711	0	4,085	193,620	2,245	955	3,396	0	800,991	
1922	352,807	0	0	0	43,667	0	382,956	73,351	0	0	991,979	14,972	2,886	4,175	0	1,513,986	4.3
1923	213,781	0	0	0	74,884	218	410,194	245,187	0	2,360	577,390	1,111	1,647	2,376	0	1,315,367	6.2
1924	910,521	0	0	0	126,685	1,819	1,003,422	8,350	0	1,115	102,217	5,830	425	55	0	1,249,918	1.4
1925	677,566	0	0	0	3,736	0	51,222	195,414	0	332	427,580	7,817	5,367	456	0	691,924	1.0
1926	695,314	0	0	0	25,764	919	279,018	304,619	273	3,461	879,220	3,821	55	2,246	0	1,499,396	2.2
1927	429,525	0	207	0	113,952	1,499	951,950	100,633	0	744	203,942	1,586	1,225	5,557	0	1,381,295	3.2
1928	1,020,520	0	0	0	40,063	0	353,506	77,224	0	12,047	300,603	3,129	1,042	1,618	0	789,232	0.8
1929	914,307	0	0	0	16,254	0	584,561	38,873	253	5,675	361,557	1,165	2,192	1,251	0	1,011,781	1.1
1930	359,405	0	0	0	26,688	0	426,128	41,867	0	6,177	344,419	16,565	2,065	0	0	863,909	2.4
1931	631,986	0	0	0	30,856	2,454	296,899	138,440	0	3,747	264,858	0	2,678	635	0	740,567	1.2
1932	1,113,859	0	0	0	24,809	0	475,759	46,764	0	8,530	185,288	2,049	13,674	1,502	0	758,375	0.7
1933	310,088	0	0	0	35,679	0	311,946	35,705	0	48,795	321,467	0	1,267	301	0	755,160	2.4
1934	447,642	0	0	0	19,716	90	708,212	33,934	0	4,066	88,027	969	4,299	1,026	0	860,339	1.9
1935	462,469	0	69	0	37,642	308	148,352	16,893	0	13,842	299,288	3,284	4,082	976	0	524,736	1.1
1936	376,838	0	0	0	9,342	43	504,624	57,326	0	13,186	284,707	3,117	9,326	2,233	0	883,904	2.3
1937	406,618	0	33	0	31,723	145	480,250	54,435	0	30,220	651,642	7,116	2,664	639	0	1,258,867	3.1
1938	305,827	0	111	0	30,143	137	1,099,657	124,382	0	8,660	186,504	2,032	1,128	270	0	1,453,024	4.8
1939	512,754	0	106	0	68,919	315	314,851	35,542	0	3,674	79,035	859	5,420	1,305	0	510,026	1.0
1940	152,957	0	244	0	19,705	90	133,474	15,039	0	17,705	380,481	4,130	10,049	2,422	0	583,339	3.8
1941	531,904	0	70	0	8,342	38	642,782	72,293	0	32,912	706,532	7,654	2,225	537	0	1,473,385	2.8
1942	516,621	0	30	0	40,124	183	1,194,007	134,060	0	7,305	156,659	1,695	4,662	1,112	0	1,539,837	3.0
1943	1,205,418	0	143	0	74,442	340	264,830	29,686	0	15,007	324,527	3,562	5,405	1,321	0	719,263	0.6
1944	351,212	0	266	0	16,492	75	547,139	62,179	0	18,110	385,087	4,101	2,886	711	0	1,037,046	3.0
1945	151,326	0	59	0	34,405	157	652,782	72,138	0	9,784	207,054	2,186	1,246	315	0	980,126	6.5
1946	739,884	0	121	0	40,246	183	351,541	38,531	0	4,401	91,579	937	1,531	371	0	529,441	0.7
1947	1,393,990	0	147	0	21,549	98	156,343	16,644	0	5,048	108,068	1,165	1,316	333	0	310,711	0.2
1948	313,319	0	80	0	9,390	42	182,792	20,430	0	4,658	96,858	989	826	0	0	316,065	1.0
1949	574,715	0	36	0	11,360	52	165,402	17,581	0	1,766	103,345	0	496	650	0	300,688	0.5
1950	861,070	0	41	0	9,924	45	199,966	31,411	0	2,206	245,826	407	2,903	1,820	0	494,549	0.6

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Appendix B.2. (page 2 of 3)

Year	Parent Esccapement	Age Compostion 0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3	Other	Total	Return/ Spawner
1951	490,899	0	38	0	33,082	0	618,729	13,748	0	7,046	242,042	0	1,028	0	0	915,713	1.9
1952	260,540	0	0	0	22,213	0	258,747	30,836	0	986	229,563	0	3,932	8,403	0	554,680	2.1
1953	221,408	0	0	0	9,167	428	125,399	32,350	0	470	396,916	1,935	934	5,424	0	573,023	2.6
1954	277,912	0	547	0	2,848	0	39,658	75,361	0	771	418,442	804	1,661	5,069	0	545,161	2.0
1955	201,409	0	369	0	32,187	0	303,988	32,708	0	168	363,162	1,252	0	0	0	733,834	3.6
1956	483,024	0	1,330	0	12,515	0	106,327	36,113	0	435	221,169	0	1,349	4,781	0	384,019	0.8
1957	328,779	0	0	0	17,746	622	232,393	109,475	0	351	332,661	2,104	1,189	1,319	0	697,860	2.1
1958	212,594	0	1,459	0	50,630	0	23,204	139,797	0	0	418,960	980	93	432	0	635,555	3.0
1959	308,645	0	3,286	0	18,094	907	109,165	81,640	227	117	197,975	738	689	187	0	413,025	1.3
1960	357,230	0	146	0	24,446	491	122,278	8,273	0	1,314	210,884	141	1,618	12,824	0	382,415	1.1
1961	254,970	0	718	0	1,899	799	109,935	18,702	0	220	401,733	2,698	5,335	2,420	0	544,459	2.1
1962	324,860	0	123	0	4,312	0	44,074	69,811	0	998	692,188	1,074	1,109	0	0	813,689	2.5
1963	200,314	0	0	0	5,536	1,300	103,116	68,605	0	29	243,939	0	1,501	867	0	424,893	2.1
1964	166,625	0	88	0	6,607	4,550	24,880	65,639	0	700	138,282	943	205	6,114	0	248,008	1.5
1965	163,151	0	1,636	0	25,157	5,547	159,113	57,942	0	382	650,181	1,028	659	96,111	0	997,756	6.1
1966	183,525	0	1,715	0	14,517	925	300,759	30,263	0	461	413,807	2,453	0	18,073	0	782,974	4.3
1967	189,000	0	501	0	6,187	768	78,308	31,097	0	701	482,538	2,780	1,342	0	0	604,221	3.2
1968	244,836	0	914	0	3,835	0	115,840	20,435	339	636	583,517	15,603	2,691	30,092	0	773,902	3.2
1969	132,055	0	0	0	1,239	1,062	85,064	270,966	283	818	487,805	7,288	0	16,722	0	871,247	6.6
1970	119,952	0	0	0	18,234	12,035	27,646	151,089	0	1,318	461,271	12,205	0	19,870	0	703,668	5.9
1971	232,501	0	1,500	0	15,448	12,620	185,532	410,628	0	236	1,898,372	4,096	2,842	13,887	0	2,545,161	10.9
1972	231,270	0	0	0	30,087	2,445	120,639	96,178	0	98	718,493	30,779	267	3,698	0	1,002,684	4.3
1973	247,144	0	0	0	5,778	10,740	56,736	173,028	0	0	919,784	3,852	1,248	4,756	0	1,175,922	4.8
1974	364,612	0	4,420	0	19,284	2,764	105,493	196,981	0	51	677,611	2,036	2,316	9,262	2,703	1,022,921	2.8
1975	314,084	0	0	0	24,550	7,125	123,634	185,390	0	914	859,629	3,573	6,449	2,334	7,609	1,221,207	3.9
1976	341,828	0	1,103	0	59,255	807	775,826	94,346	0	2,484	499,554	0	3,117	10	5,083	1,441,585	4.2
1977	463,561	0	252	0	52,795	3,975	155,472	59,987	0	1,958	1,207,619	0	2,034	789	7,477	1,492,358	3.2
1978	263,009	0	422	0	16,755	5,822	259,993	318,606	0	686	278,532	490	1,752	176	239	883,473	3.4
1979	317,889	0	2,029	0	102,991	5,057	281,909	28,124	0	1,235	278,237	388	1,469	784	3,223	705,446	2.2
1980	279,729	0	1,794	8,287	13,217	6,060	156,838	320,949	0	632	448,135	3,096	830	1,070	1,189	962,097	3.4
1981	301,092	0	1,116	0	88,980	5,093	232,004	74,324	0	664	370,421	151	649	74	35	773,511	2.6
1982	305,193	0	2,542	0	51,480	3,199	194,469	108,490	0	740	582,904	160	1,383	0	301	945,668	3.1
1983	441,561	0	0	2,715	12,125	3,824	148,143	109,807	0	208	1,105,502	807	11,621	76	0	1,394,828	3.2
1984	268,496	120	914	552	30,409	10,724	150,188	324,007	0	2,480	1,638,859	1,743	9,695	7,155	597	2,177,443	8.1
1985	369,262	98	689	207	18,638	16,398	174,283	161,966	0	6,682	501,843	1,161	4,112	3,789	173	890,039	2.4
1986	207,231	103	2,745	13,060	179,104	321	345,786	175,958	0	1,834	497,777	7,787	12,896	2,149	619	1,240,139	6.0

-Continued-

Appendix B.2. (page 3 of 3)

Year	Parent Esccapement	Age Compostion 0.2	1.1	0.3	1.2	2.1	1.3	2.2	3.1	1.4	2.3	3.2	2.4	3.3	Other	Total	Return/ Spawner
1987	214,452	6,253	686	1,066	72,172	9,757	457,744	225,494	0	6,045	1,037,042	6,866	7,292	71,800	125	1,902,342	8.9
1988	255,180	0	2,430	1,115	57,578	3,326	295,438	109,596	0	2,118	206,346	4,081			1,268	683,296	2.7
1989	557,171	418	7,979	9,244	171,035	4,773	273,461	105,477	0								
1990	335,867	447	442	6,049	26,006	1,321											
1991	382,587	134	201														
1992	405,922																
1993	333,114																
1994	197,445																

Appendix C. Emergency orders for the Chignik Management Area, 1994.

EMERGENCY ORDER NO. 4-F-L-01-95

Issued at: Kodiak, AK
April 10, 1995

EFFECTIVE DATE: 12:00 Noon
Saturday, April 15, 1995

Expiration Date: June 30,1995
or until superseded by a subsequent emergency order

EXPLANATION:

This emergency order establishes Chignik Management Area commercial herring fishing periods during the sac roe season (April 15 through June 30) which will begin at 12:00 noon on every odd numbered day and end at 12:00 noon on the following even numbered day. The first period will begin at 12:00 noon April 15 and end at 12:00 noon April 16 and henceforth on all odd numbered days of the month separated by 24 hour closures until 12:00 noon June 30. During the food and bait season (August 15 through February 28) the fishery will be open 24 hours per day, 7 days per week. This emergency order also closes the Big River section to herring fishing until further notice.

REGULATION:

5 AAC 27.560 is amended to read:

5 AAC 27.560. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b) During the open season from 12:00 noon April 15 through June 30 herring may be taken during 24 hour fishing periods beginning at 12:00 noon on every odd numbered day and ending at 12:00 noon the following even numbered day. Herring may not be taken in any district or section during the following periods:

(1) From 12:00 noon April 16 through 12:00 noon April 17.
(2) From 12:00 noon April 18 through 12:00 noon April 19.
(3) From 12:00 noon April 20 through 12:00 noon April 21.
(4) From 12:00 noon April 22 through 12:00 noon April 23.
(5) From 12:00 noon April 24 through 12:00 noon April 25.
(6) From 12:00 noon April 26 through 12:00 noon April 27.
(7) From 12:00 noon April 28 through 12:00 noon April 29.
(8) From 12:00 noon April 30 through 12:00 noon May 1.
(9) From 12:00 noon May 2 through 12:00 noon May 3.
(10) From 12:00 noon May 4 through 12:00 noon May 5.
(11) From 12:00 noon May 6 through 12:00 noon May 7.
(12) From 12:00 noon May 8 through 12:00 noon May 9.
(13) From 12:00 noon May 10 through 12:00 noon May 11.
(14) From 12:00 noon May 12 through 12:00 noon May 13.
(15) From 12:00 noon May 14 through 12:00 noon May 15.
(16) From 12:00 noon May 16 through 12:00 noon May 17.
(17) From 12:00 noon May 18 through 12:00 noon May 19.
(18) From 12:00 noon May 20 through 12:00 noon May 21.
(19) From 12:00 noon May 22 through 12:00 noon May 23.
(20) From 12:00 noon May 24 through 12:00 noon May 25.
(21) From 12:00 noon May 26 through 12:00 noon May 27.
(22) From 12:00 noon May 28 through 12:00 noon May 29.
(23) From 12:00 noon May 30 through 12:00 noon May 31.
(24) From 12:00 noon June 2 through 12:00 noon June 3.

-Continued-

(25) From 12:00 noon June 4 through 12:00 noon June 5.
(26) From 12:00 noon June 6 through 12:00 noon June 7.
(27) From 12:00 noon June 8 through 12:00 noon June 9.
(28) From 12:00 noon June 10 through 12:00 noon June 11.
(29) From 12:00 noon June 12 through 12:00 noon June 13.
(30) From 12:00 noon June 14 through 12:00 noon June 15.
(31) From 12:00 noon June 16 through 12:00 noon June 17.
(32) From 12:00 noon June 18 through 12:00 noon June 19.
(33) From 12:00 noon June 20 through 12:00 noon June 21.
(34) From 12:00 noon June 22 through 12:00 noon June 23.
(35) From 12:00 noon June 24 through 12:00 noon June 25.
(36) From 12:00 noon June 26 through 12:00 noon June 27.
(37) From 12:00 noon June 28 through 12:00 noon June 29.

5 AAC 27.580 is amended to read:

5 AAC 27.580. WATERS CLOSED TO HERRING FISHING.

(a) During the period June 12 through October 31, herring may not be taken in waters described in 5 AAC 15.350 and 5 AAC 39.290.

(b) The Big River section of the Eastern District is closed to commercial herring fishing until further notice.

The Big River section is described as follows: all waters of Amber and Aniakchak bays bounded by 157°11'33" W. long., and the latitude of the southernmost marker 500 yards from the mouth of Aniakchak Lagoon.

JUSTIFICATION:

Regulations adopted by the Alaska Board of Fisheries established that weekly fishing periods for herring in the Chignik Area would be announced by emergency order. During the roe season (April 15 through June 30) herring stocks are concentrated and are vulnerable to over exploitation. The 24 hour on and 24 hour off fishery will reduce the time that stocks are subject to exploitation and will allow the Department more time to collect catch information and assess the situation(s). During the food and bait season (August 15 through February 28) effort is anticipated to be low and stocks dispersed, therefore a 7 day per week fishery is justified.

The Big River section has not received any appreciable recruitment of herring into that fishery since 1980 when it was first harvested. The trend in this stock's age composition has regressed from a healthy 1980 biomass dominated by 4 and 5 year olds to a diminished biomass in 1986 dominated by 8 and 9 year old fish. Consequently, the Big River section (272-20 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1995 until a biomass of multi-age herring is present in sufficient quantity and of healthy age composition to warrant exploitation.

-Continued-

EMERGENCY ORDER NO. 4-F-L-02-94

Issued at: Chignik, AK
June 20, 1994

EFFECTIVE DATE: 5:00 A.M.
Wednesday, June 22, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 5:00 A.M. Thursday, June 23, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay, Central, and Eastern Districts of the Chignik Management Area, will open to commercial salmon fishing from 5:00 A.M. Wednesday, June 22 until 5:00 A.M. Thursday, June 23. Fishing will be allowed up to the regulatory markers at Mensis Point in Chignik Lagoon. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 5:00 A.M. Wednesday, June 22. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishermen are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 5:00 A.M. Wednesday, June 22 until 5:00 A.M. Thursday, June 23.

(b) In the Central and Eastern Districts, salmon may be taken from 5:00 A.M. Wednesday, June 22 until 5:00 A.M. Thursday, June 23.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay, Central, and Eastern Districts will be open to commercial salmon fishing from 5:00 A.M. Wednesday, June 22 until 5:00 A.M. Thursday, June 23.

5 AAC 15.350 is amended to read:

5AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(c) The Western District includes all waters south and west of Jack Point at 56 17'32" N. lat., 158 11'56" W. long., excluding the waters of Chignik Lagoon, to Coal Cape at 55 53'28" N. lat., 159 00'20" W. long..

(d) The Perryville District includes all waters between Coal Cape at 55 23'28" N. lat., 159 00'20" W. long., and Kupreanof Point at 55 33'55" N. lat., 159 35'50" W. long..

JUSTIFICATION:

The cumulative salmon escapement through the Chignik River weir as of June 19 is approximately 289,000 sockeye salmon. The escapement schedule calls for between 275-325,000 sockeye salmon by June 25. Since the escapement objectives have been achieved and an estimated 25-30,000 fish have been determined to be in the Lagoon from a test fishery, a commercial fishery is justified to harvest fish surplus to escapement requirements.

-Continued-

EMERGENCY ORDER NO. 4-F-L-03-94

Issued at: Chignik, AK
June 21, 1994

EFFECTIVE DATE: 4:00 P.M.
Tuesday, June 21, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 4:00 P.M.
Wednesday, June 22, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay, Central, and Eastern Districts of the Chignik Management Area, will open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21 until 4:00 P.M. Wednesday, June 22. Fishing will be allowed up to the regulatory markers at Mensis Point in Chignik Lagoon. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 4:00 P.M. Tuesday, June 21. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishermen are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 4:00 P.M. Tuesday, June 21 until 4:00 P.M. Wednesday, June 22.

(b) In the Central and Eastern Districts, salmon may be taken from 4:00 P.M. Tuesday, June 21 until 4:00 P.M. Wednesday, June 22.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay, Central, and Eastern Districts will be open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21 until 4:00 P.M. Wednesday, June 22.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(c) The Western District includes all waters south and west of Jack Point at 56 17'32" N. lat., 158 11'56" W. long., excluding the waters of Chignik Lagoon, to Coal Cape at 55 53'28" N. lat., 159 00'20" W. long..

(d) The Perryville District includes all waters between Coal Cape at 55 23'28" N. lat., 159 00'20" W. long., and Kupreanof Point at 55 33'55" N. lat., 159 35'50" W. long..

JUSTIFICATION:

Due to an apparent underestimation of the numbers of sockeye salmon present in Chignik Lagoon and an escapement of approximately 17,000 sockeye salmon through the weir since midnight June 21, it is necessary to open the fishery today June 21, to curtail escapement.

-Continued-

EMERGENCY ORDER NO. 4-F-L-04-94

Issued at: Chignik, AK
June 22, 1994

EFFECTIVE DATE: 10:00 A.M.
Wednesday, June 22, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: until further notice, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay, Central, and Eastern Districts of the Chignik Management Area, will remain open to commercial salmon fishing until further notice. Fishing will be allowed up to the regulatory markers at Mensis Point in Chignik Lagoon.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 4:00 P.M. Tuesday, June 21 until further notice.

(b) In the Central and Eastern Districts, salmon may be taken from 4:00 P.M. Tuesday, June 21 until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay, Central, and Eastern Districts will be open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21 until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(c) The Western District includes all waters south and west of Jack Point at 56 17'32" N. lat., 158 11'56" W. long., excluding the waters of Chignik Lagoon, to Coal Cape at 55 53'28" N. lat., 159 00'20" W. long..

(d) The Perryville District includes all waters between Coal Cape at 55 23'28" N. lat., 159 00'20" W. long., and Kupreanof Point at 55 33'55" N. lat., 159 35'50" W. long..

JUSTIFICATION:

Daily escapement at this time is approximately 17,000 sockeye salmon, bringing the total escapement to approximately 377,000 sockeye salmon. The escapement schedule for June 22 is between 225 - 250,000 sockeye salmon. It is necessary to extend the fishery until further notice to curtail escapement.

-Continued-

EMERGENCY ORDER NO. 4-F-L-05-94

Issued at: Chignik, AK
June 28, 1994

EFFECTIVE DATE: 8:00 A.M.
Wednesday, June 29, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: until further notice, or until superseded by subsequent emergency order.

EXPLANATION:

The Eastern District of the Chignik Management Area will close to commercial salmon fishing at 8:00 A.M. Wednesday, June 29, 1994, until further notice to evaluate the transition period the first and second Chignik sockeye runs. The Chignik Bay and Central Districts of the Chignik Management Area, will remain open to commercial salmon fishing until further notice. Fishing will be allowed up to the regulatory markers at Mensis Point in Chignik Lagoon.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

(b) In the Central District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will remain open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(a) The Eastern District which includes all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik area.

(c) The Western District includes all waters south and west of Jack Point at 56 17'32" N. lat., 158 11'56" W. long., excluding the waters of Chignik Lagoon, to Coal Cape at 55 53'28" N. lat., 159 00'20" W. long..

(d) The Perryville District includes all waters between Coal Cape at 55 23'28" N. lat., 159 00'20" W. long., and Kupreanof Point at 55 33'55" N. lat., 159 35'50" W. long..

JUSTIFICATION:

The total escapement at this time is approximately 657,000 sockeye salmon and the catch to date is approximately 338,000 sockeye salmon. The Eastern District can be closed to evaluate the transition period between the first and second Chignik runs as mandated by the Eastern District Management Plan.

-Continued-

EMERGENCY ORDER NO. 4-F-L-06-94

Issued at: Chignik, AK
July 08, 1994

EFFECTIVE DATE: 6:00 P.M.
Saturday, July 09, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:00 Noon
Tuesday, July 12, 1994, or until superseded by subsequent emergency order.

EXPLANATION:

The Eastern, Western (except the Mitrofania Section), and Perryville Districts of the Chignik Management Area will open to commercial salmon fishing at 6:00 P.M. Saturday, July 09, 1994, for 66 hours until 12:00 Noon Tuesday, July 12, 1994. The Chignik Bay and Central Districts of the Chignik Management Area, will remain open to commercial salmon fishing until further notice. Fishing will be allowed up to the regulatory markers at Mensis Point in Chignik Lagoon.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

(b) In the Central District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will remain open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(c)(3) Mitrofania Section: all waters, including Mitrofania Island between a point on the west side of Dorner (Kuiukta) Bay's entrance at 55 57'N.lat., 158 40'W.long., and Stirni Point at 55 54'50"N.lat., 158 55'W.long..

JUSTIFICATION:

The total escapement to date for the early run is approximately 617,000 sockeye salmon and for the second run, approximately 57,000 sockeye salmon. The escapement goal for the first run has been attained, while the escapement goal for the second run is ahead of the scheduled goal of 50 - 60,000 sockeye salmon by July 12. The catch to date is approximately 925,000, excluding the 268,000 sockeye salmon that should have been caught during the strike.

-Continued-

EMERGENCY ORDER NO. 4-F-L-07-94

Issued at: Chignik, AK
July 10, 1994

EFFECTIVE DATE: Immediately

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:00 Noon
Tuesday, July 12, 1994, or until superseded by subsequent emergency order.

EXPLANATION:

The Mitrofania Section of the Western District of the Chignik Management Area will open to commercial salmon fishing immediately until 12:00 Noon Tuesday, July 12, 1994. As of this announcement, the markers in Chignik Lagoon in the Chignik Bay District of the Chignik Management Area, will be moved to Hume's Point to Island Markers to Green Point to Rocky Point until further notice.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

(b) In the Central District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will remain open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume's Point to the north side of Chignik Island (56 17'25"N.lat., 158 35'30"W.long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'38" N.lat., 158 35'54" W.long.);

JUSTIFICATION:

The test fishery at Mirofania Island proved to have minimal numbers of immature salmon in the test sets conducted. The marker move in Chignik Lagoon is necessary to insure adequate escapement for the second run. As of 09 July, the second run escapement is at approximately 58,000 sockeye salmon. The next escapement goal for the second run is between 65,000 and 75,000 sockeye salmon by 14 July.

-Continued-

EMERGENCY ORDER NO. 4-F-L-08-94

Issued at: Chignik, AK
July 11, 1994

EFFECTIVE DATE: 6:30 P.M.
Monday, July 11, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:00 Noon
Wednesday, July 13, 1994, or until superseded by subsequent emergency order.

EXPLANATION:

The Eastern, Western, and Perryville Districts of the Chignik Management Area will be extended for an additional 24 hours until 12:00 Noon Wednesday, July 13, 1994, for commercial salmon fishing. Chignik Bay and Central Districts of the Chignik Management Area will remain open to commercial salmon fishing until further notice. The markers in Chignik Lagoon in the Chignik Bay District of the Chignik Management Area are at Hume's Point to Island Markers to Green Point to Rocky Point until further notice.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

(b) In the Central District, salmon may be taken from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will remain open to commercial salmon fishing from 4:00 P.M. Tuesday, June 21, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume's Point to the north side of Chignik Island (56 17'25"N.lat., 158 35'30"W.long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'38" N.lat., 158 35'54" W.long.);

JUSTIFICATION:

Due to weather days on 09 and 10 July, the Eastern, Western, and Perryville Districts will be extended for another 24 hours. Second run escapement at this time is at approximately 61,000 sockeye salmon, above the scheduled escapement goal of 60,000 fish for 12 July. Average daily catches of sockeye salmon are approximately 48,000 fish per day.

-Continued-

EMERGENCY ORDER NO. 4-F-L-09-94

Issued at: Chignik, AK
July 13, 1994

EFFECTIVE DATE: 12:00 Noon
Thursday, July 14, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: Until further notice, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay and Central Districts of the Chignik Management Area will close to commercial salmon fishing at 12:00 Noon, Thursday, July 14, 1994, until further notice. Fishers are hereby placed on 12 hour notice for a possible reopening in the Chignik Bay and Central Districts of the Chignik Management Area. The Eastern, Western, and Perryville Districts of the Chignik Management Area will remain closed to commercial salmon fishing until further notice.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may not be taken from 12:00 Noon, Thursday, July 14, until further notice.

(b) In the Central District, salmon may not be taken from 12:00 Noon, Thursday, July 14, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will close to commercial salmon fishing at 12:00 Noon, Thursday, July 14, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

The Chignik Management Area which includes all waters of Alaska on the south side of the Alaska Peninsula enclosed by 156 20'13"W.long., (the longitude of the southern entrance to Imuya Bay near Kilokak Rocks) and a line extending 135 southeast from Kupreanof Point.

JUSTIFICATION:

The second run sockeye salmon escapement at this time is at approximately 64,000 fish with escapement at approximately 1,200 fish per day. The scheduled upper escapement goal of 75,000 fish for July 14 will not be attained unless a closure is implemented. However, a short closure duration may be necessary to prevent overshooting the interim escapement goals for the Chignik Lake run.

-Continued-

EMERGENCY ORDER NO. 4-F-L-10-94

Issued at: Chignik, AK
July 18, 1994

EFFECTIVE DATE: 12:00 Noon
Tuesday, July 19, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:01 A.M.
Friday, July 22, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay and Central Districts of the Chignik Management Area will open to commercial salmon fishing for 24 hours from 12:00 Noon, Tuesday, July 19, 1994, until 12:00 Noon, Wednesday, July 20, 1994, with a possible extension. Fishing will be allowed up to the regulatory markers at Hume Point to the Island Markers and from Green Point to Rocky Point in Chignik Lagoon. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 12:00 Noon, Tuesday, July 19, 1994. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishers are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening.

The Western and Perryville Districts of the Chignik Management Area will open to commercial salmon fishing for 60 hours from 12:00 Noon, Tuesday, July 19,1994 until 12:01 A.M., Friday, July 22, 1994. The Eastern District of the Chignik Management Area will remain closed to commercial salmon fishing until further notice.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 12:00 Noon, Tuesday, July 19, 1994, until 12:00 Noon, Wednesday, July 20, 1994.

(b) In the Central District, salmon may be taken from 12:00 Noon, Tuesday, July 19, 1994, until 12:00 Noon, Wednesday, July 20, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will open to commercial salmon fishing from 12:00 Noon, Tuesday, July 19, 1994, until 12:00 Noon, Wednesday, July 20, 1994.

(b) The Western and Perryville Districts will open to commercial salmon fishing from 12:00 Noon, Tuesday, July 19, 1994, until 12:01 A.M., Friday, July 22, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume Point to the north side of Chignik Island (56 17'25" N.lat., 158 35'30" W.long.);

-Continued-

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'25" N.lat., 158 34'54" W.long.);

(2) The Eastern District which includes all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik Management Area.

JUSTIFICATION:

A fishery is warranted in the Chignik Bay and Central Districts because of an increased sockeye salmon escapement through the weir. As of 9:30 A.M. today, approximately 12,000 sockeye salmon passed through the weir for a total of 85,000 second run sockeye salmon. A fishery is warranted in the Western and Perryville Districts because of a good showing of chum salmon from aerial surveys. Any future openings in the Eastern District will depend upon good showings of chum and pink salmon.

EMERGENCY ORDER NO. 4-F-L-11-94

Issued at: Chignik, AK
July 22, 1994

EFFECTIVE DATE: 6:00 A.M.
Saturday, July 23, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 6:00 A.M.
Sunday, July 24, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay and Central Districts of the Chignik Management Area will open to commercial salmon fishing for 24 hours at 6:00 A.M., Saturday, July 23, 1994, until 6:00 A.M., Sunday, July 24, 1994, with a possible extension. Fishing will be allowed up to the regulatory markers at Hume Point to the Island Marker extending on through the backside of Chignik Island to Green Point in Chignik Lagoon. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 6:00 A.M., Saturday, July 23, 1994. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishers are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening. Closed waters in the Central District will include all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long..

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 6:00 A.M., Saturday, July 23, 1994, until 6:00 A.M., Sunday, July 24, 1994.

(b) In the Central District, salmon may be taken from 6:00 A.M. Saturday, July 23, 1994, until 6:00 A.M., Sunday, July 24, 1994.

5 AAC 15.320 is amended to read:

-Continued-

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central

Districts will be open to commercial salmon fishing from 6:00 A.M., Saturday, July 23, 1994, until 6:00 A.M., Sunday, July 22, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume Point to the north side of Chignik Island (56 17'25" N.lat., 158 35'30" W.long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'38" N.lat., 158 34'54" W.long.);

(2) Central District

(A) all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long.;

(3) the Eastern District, which includes all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik Management Area;

(4) the Western District, which includes all waters south and west of Jack Point at 56 17'32" N. lat., 158 11'56" W. long., excluding the waters of Chignik Lagoon, to Coal Cape at 55 53'28" N. lat., 159 00'20" W. long..

(5) the Perryville District, which includes all waters between Coal Cape at 55 23'28" N. lat., 159 00'20" W. long., and Kupreanof Point at 55 33'55" N. lat., 159 35'50" W. long..

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 142,000 fish and it appears that our July 23 interim escapement goal of 160,000 fish will be attained. There is a considerable build-up of salmon behind the weir. As of 10:00 A.M., approximately 22,000 sockeye salmon have been counted through the weir. A fishery is warranted to prevent overshooting our escapement goal of 160,000 fish on 23 July, 1994.

-Continued-

EMERGENCY ORDER NO. 4-F-L-12-94

Issued at: Chignik, AK
July 23, 1994

EFFECTIVE DATE: 6:30 P.M.
Saturday, July 23, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 6:00 A.M.
Tuesday, July 26, or until superseded by subsequent emergency order.

EXPLANATION:

The fishing periods for the Chignik Bay and Central Districts of the Chignik Management Area will be extended to commercial salmon fishing for 48 hours until 6:00 A.M., Tuesday, July 26, 1994, with a possible extension. Fishing will be allowed up to the regulatory markers at Hume Point to the Island Marker extending on through the backside of Chignik Island to Green Point in Chignik Lagoon. Closed waters in the Central District will include all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long..

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken until 6:00 A.M., Tuesday, July 26, 1994.

(b) In the Central District, salmon may be taken until 6:00 A.M., Tuesday, July 26, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will be open to commercial salmon fishing until 6:00 A.M., Tuesday, July 26, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume Point to the north side of Chignik Island (56 17'25" N.lat., 158 35'30" W.long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'38" N.lat., 158 34'54" W.long.);

(2) Central District

(A) all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long.;

-Continued-

(3) the Eastern District, which includes all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik Management Area;

(4) the Western District, which includes all waters south and west of Jack Point at 56 17'32" N. lat., 158 11'56" W. long., excluding the waters of Chignik Lagoon, to Coal Cape at 55 53'28" N. lat., 159 00'20" W. long..

(5) the Perryville District, which includes all waters between Coal Cape at 55 23'28" N. lat., 159 00'20" W. long., and Kupreanof Point at 55 33'55" N. lat., 159 35'50" W. long..

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 142,000 fish and it appears that our July 23 interim escapement goal of 160,000 fish will be attained. There is a considerable build-up of salmon behind the weir. As of 10:00 A.M., approximately 22,000 sockeye salmon have been counted through the weir. A fishery is warranted to prevent overshooting our escapement goal of 160,000 fish on 23 July, 1994.

EMERGENCY ORDER NO. 4-F-L-13-93

Issued at: Chignik, Ak
July 25, 1994

EFFECTIVE DATE: 12:01 A.M.
Thursday, July 30, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:01 A.M. Saturday, July 30, or until superseded by subsequent emergency order.

EXPLANATION:

The Western and Perryville Districts of the Chignik Management Area will open to commercial salmon fishing for 48 hours at 12:01 A.M. Thursday, July 28, 1994, until 12:01 A.M. Saturday, July 30, 1994. Closed waters in the Perryville and Western Districts will include all the waters northwest of a line from Alexander Point to Cape Itki. Markers in Ivanof Bay will be the Road Island markers. The Eastern District will remain closed to commercial salmon fishing.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (b) In the Western and Perryville Districts, salmon may be taken from 12:01 A.M. Thursday, July 28, until 12:01 A.M. Saturday, July 30.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Western and Perryville Districts will be open to commercial salmon fishing from 12:01 A.M. Thursday, July 28, until 12:01 A.M. Saturday, July 30.

5 AAC 15.350 is amended to read:

-Continued-

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(a) The Eastern District which includes all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik area.

(b) The Chignik Bay District which includes all waters of Chignik Bay and Lagoon west of a line from Jack Point at 56 17'32" N.lat., 158 11'56" W.long., to Neketa Creek at 56 24'10" N.lat., 158 27'37" W.long..

(c) In (c) In the Western District, all waters northwest of a line from Cape Itki to Coal Cape (55 53'28" N.lat., 159 00'20" W.long.).

(d) In the Perryville District, all waters northwest of a line from Coal Cape (55 53'28" N.lat., 159 00'20" W.long.) to Alexander Point (55 47'22" N.lat., 159 18'50" W.long.).

(e) The Central District includes all waters, excluding the waters of the Chignik Bay District, between Jack Point (56 17'32" N.lat., 158 11'56" W.long.), and the southernmost marker 500 yards from the mouth of Aniakchak Lagoon.

JUSTIFICATION:

There is an estimated 180,065 second run sockeye salmon through the weir today at this time. The escapement goal for July 26 is 180,00 sockeye salmon. Some bays in the Western and perryville Districts and the entire Eastern District are closed due to weather preventing aerial surveys.

EMERGENCY ORDER NO. 4-F-L-14-94

Issued at: Chignik, AK
July 27, 1994

EFFECTIVE DATE: 6:00 A.M
Thursday, July 28, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 6:00 A.M.
Saturday, July 30, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay and Central Districts of the Chignik Management Area will open to commercial salmon fishing for 48 hours at 6:00 A.M., Thursday, July 28, 1994, until 6:00 A.M., Saturday, July 30, 1994, with a possible extension. Fishing will be allowed up to the regulatory markers at Hume Point to the Island Marker extending on through the backside of Chignik Island to Green Point in Chignik Lagoon. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 6:00 A.M., Thursday, July 28, 1994. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishers are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening. Closed waters in the Central District will include all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long.. The Eastern District of the Chignik Management Area will remain closed to commercial salmon fishing.

-Continued-

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 6:00 A.M., Thursday, July 28, 1994, until 6:00 A.M., Saturday, July 30, 1994.

(b) In the Central District, salmon may be taken from 6:00 A.M. Thursday, July 28, 1994, until 6:00 A.M., Saturday, July 30, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay and Central Districts will be open to commercial salmon fishing from 6:00 A.M., Thursday, July 28, 1994, until 6:00 A.M., Saturday, July 30, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon
(A) southwest of a line from the tip of Hume Point to the north side of Chignik Island (56 17'25" N.lat., 158 35'30" W.long.);
(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'38" N.lat., 158 34'54" W.long.);

(2) Central District: all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long.;

(3) Eastern District: all waters from the southernmost marker 500 yards from the mouth of Anaikchak Lagoon to the eastern boundary of the Chignik area.

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 196,000 fish at this time and it appears that our July 29 interim escapement goal of 195,000 fish will be attained. The entire Eastern District is closed due to lack of adequate escapement into those streams.

EMERGENCY ORDER NO. 4-F-L-15-94

Issued at: Chignik, AK
July 31, 1994

EFFECTIVE DATE: 12:01 A.M
Wednesday, August 03, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:01 A.M. Friday, August 03, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay, Central, Western, and Perryville Districts of the Chignik Management Area will open to commercial salmon fishing for 48 hours starting at 12:01 A.M., Wednesday, August 03, 1994, until 12:01 A.M., Friday, August 05, 1994, with a

-Continued-

possible extension. Fishing will be allowed up to the regulatory markers at Hume Point to the Island Marker extending on through the backside of Chignik Island to Green Point in Chignik Lagoon. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 12:01 A.M., Wednesday, August 03, 1994. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishers are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening. Alfred and Dago Frank Creeks in the Chignik Bay District have 500 yard closures from August 01 to the end of the commercial salmon season. Closed waters in the Central District will include all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long.. Closed waters in the Perryville and Western Districts will include all the waters northeast of a line from Alexander Point to Cape Itki. Markers in the Ivanof Bay will be the Road Island markers. The Eastern District of the Chignik Management Area will remain closed to commercial salmon fishing.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 12:01 A.M., Wednesday, August 03, 1994, until 12:01 A.M., Friday, August 05, 1994.

(b) In the Central, Western, and Perryville Districts, salmon may be taken from 12:01 A.M., Wednesday, August 03, 1994, until 12:01 A.M., Friday, August 05, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay, Central, Western, and Perryville Districts will be open to commercial salmon fishing from 12:01 A.M., Wednesday, August 03, 1994, until 12:01 A.M., Friday, August 05, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume Point to the north side of Chignik Island (56 17'25" N.lat., 158 35'30" W.long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16'38" N.lat., 158 34'54" W.long.);

(2) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season;

(3) Central District: all waters northwest of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long.;

-Continued-

(4) Western District: all waters northwest of a line from Cape Itki to Coal Cape (55 53'28"N.lat., 159 00'20"W.long.);

(5) Perryville District: all waters northwest of a line from Coal Cape (55 53'28"N.lat., 159 00'20"W.long.) to Alexander Point (55 47'22"N.lat., 159 18'50"W.long.);

(6) Eastern District: all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik area.

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 196,000 fish at this time and it appears that our July 29 interim escapement goal of 195,000 fish will be attained. Some bays in the Western and Perryville Districts and the entire Eastern District is closed due to lack of adequate escapement into those streams.

EMERGENCY ORDER NO. 4-F-L-16-94

Issued at: Chignik, AK
August 04, 1994

EFFECTIVE DATE: 12:01 A.M.
Friday, August 05, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:01 A.M.
Sunday, August 07, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay District of the Chignik Management Area will be extended to commercial salmon fishing for 48 hours starting from 12:01 A.M., Friday, August 05, 1994, until 12:01 A.M., Sunday, August 07, 1994. Fishing will be allowed up to the regulatory markers at Mensis Point. The Eastern District of the Chignik Management Area will remain closed to commercial salmon fishing.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 12:01 A.M., Friday, August 05, 1994, until 12:01 A.M., Sunday, August 07, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be extended to commercial salmon fishing from 12:01 A.M., Friday, August 05, 1994, until 12:01 A.M., Sunday, August 07, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Bay District

-Continued-

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 226,000 fish at this time. The escapement goal for the end of the season is 250,000 sockeye salmon. Escapement for the last two days has averaged 4,800 sockeye salmon. Aerial surveys westward indicate insufficient numbers of pink salmon to warrant a fishery in the bays. Pink salmon catches in the westward areas are averaging about 826 fish per vessel, another indication of low numbers of pink salmon.

EMERGENCY ORDER NO. 4-F-L-17-94

Issued at: Chignik, AK
August 08, 1994

EFFECTIVE DATE: 3:00 P.M
Tuesday, August 09, 199

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 5:00 P.M.
Friday, August 12, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay District of the Chignik Management Area will be open to commercial salmon fishing starting at 3:00 P.M., Tuesday, August 09, 1994, until 5:00 P.M., Friday, August 12, 1994. Fishing will be allowed up to the regulatory markers at Mensis Point. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 3:00 P.M., Tuesday, August 09. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishers are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 3:00 P.M., Tuesday, August 09, 1994, until 5:00 P.M., Friday, August 12, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 3:00 P.M., Tuesday, August 09, 1994, until 5:00 P.M., Friday, August 12, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

-Continued-

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 233,000 fish at this time. The escapement goal for the end of the season is 250,000 sockeye salmon. Escapement for the last two days has averaged 1,400 sockeye salmon.

EMERGENCY ORDER NO. 4-F-L-18-94

Issued at: Chignik, AK
August 08, 1994

EFFECTIVE DATE: 10:00 A.M
Tuesday, August 16, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 12:01 A.M.
Friday, August 19, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay District of the Chignik Management Area will be open to commercial salmon fishing starting at 10:00 A.M., Tuesday, August 16, 1994, until 12:01 A.M., Friday, August 19, 1994. Fishing will be allowed up to the regulatory markers at Mensis Point. Fishing in Chignik Lagoon will be started by a flare launched by ADF&G personnel at approximately 10:00 A.M., Tuesday, August 16. Any sets started prior to the launching of the flare will be required to be stern hauled and a citation will be issued. Fishers are encouraged to monitor VHF channel 6 for timed counts prior to the Chignik Lagoon opening.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 3:00 P.M., Tuesday, August 09, 1994, until 5:00 P.M., Friday, August 12, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 3:00 P.M., Tuesday, August 09, 1994, until 5:00 P.M., Friday, August 12, 1994.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

-Continued-

JUSTIFICATION:

The sockeye salmon second run escapement is approximately 233,000 fish at this time. The escapement goal for the end of the season is 250,000 sockeye salmon. Escapement for the last two days has averaged 1,400 sockeye salmon.

EMERGENCY ORDER NO. 4-F-L-19-94

Issued at: Chignik, AK
August 20, 1994

EFFECTIVE DATE: 9:00 A.M
Tuesday, August 23, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: Until
further notice, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay and Central Districts and the Castle Cape Section of the Western District of the Chignik Management Area will be open to commercial salmon fishing on a weekly scheduled basis for 72 hours starting at 9:00 A.M., Tuesday, August 23, 1994, until 9:00 A.M., Friday, August 26, 1994, until further notice. Fishing will be allowed up to the regulatory markers at Mensis Point. Closed waters in the Central District will include all waters northeast of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long..

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 9:00 A.M., Tuesday, August 23, 1994, until 9:00 A.M., Friday, August 26, 1994, on a scheduled weekly basis, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 9:00 A.M., Tuesday, August 23, 1994, until 9:00 A.M., Friday, August 26, 1994, on a weekly basis, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

-Continued-

(2) Central District: all waters northeast of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long..

(3) Eastern District: all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik area.

(4) Western District: all waters from Cape Itki at 55 58'45" N.lat., 158 30'00" W.long., to Coal Cape at 55 53'28" N.lat., 159 00'20" W.long..

(5) Perryville District: all waters from Coal Cape at 55 53'28" N.lat., 159 00'28" W.long., to Kupreanof Point at 55 33'55" N.lat., 159 35'50" W.long..

JUSTIFICATION:

Extensive surveys over the last three days have indicated that there is adequate pink salmon escapement in most of the streams in the Chignik Management Area, however, low water has caused the salmon to back out of many streams. Closed ares are to protect those fish Open areas will enable fishers to harvest late run bright pink salmon.

EMERGENCY ORDER NO. 4-F-L-20-94

Issued at: Chignik, AK
September 01, 1994

EFFECTIVE DATE: 4:00 P.M.
Thursday, September 01, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: 9:00 A.M., Sat.
September 03, 1994, or until superseded by subsequent emergency order.

EXPLANATION:

The Chignik Bay and Central Districts and the Castle Cape Section of the Western District of the Chignik Management Area will be extended to commercial salmon fishing for 24 hours, until 9:00 A.M., Saturday, September 03, 1994. Fishing will be allowed up to the regulatory markers at Mensis Point. Closed waters in the Central District will include all waters northeast of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long..

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 9:00 A.M., Tuesday, August 23, 1994, until 9:00 A.M., Saturday, September 03, 1994.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 9:00 A.M., Tuesday, August 23, 1994, until 9:00 A.M., Saturday, September 03, 1994.

-Continued-

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

(2) Central District: all waters northeast of a line in Kujulik Bay from Brandel Point on Cape Kumlik at 56 36'32" N.lat., 157 40'25" W.long., to the furthest northeast point on Cape Kumlium at 56 33'36" N.lat., 157 49'06" W.long..

(3) Eastern District: all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik area.

(4) Western District: all waters from Cape Itki at 55 58'45" N.lat., 158 30'00" W.long., to Coal Cape at 55 53'28" N.lat., 159 00'20" W.long..

(5) Perryville District: all waters from Coal Cape at 55 53'28" N.lat., 159 00'28" W.long., to Kupreanof Point at 55 33'55" N.lat., 159 35'50" W.long..

JUSTIFICATION:

A 24 hour extension is warranted due to the near record catch of coho salmon in the last two days of commercial salmon fishing.

EMERGENCY ORDER NO. 4-F-L-21-94

Issued at: Chignik, AK
September 01, 1994

EFFECTIVE DATE: 12:01 A.M
Tuesday, September 06, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: Until
further notice, or until superseded by subsequent
emergency order.

EXPLANATION:

The Chignik Bay District of the Chignik Management Area will be opened to commercial salmon fishing for 72 hours starting at 6:00 A.M., Tuesday, September 06, 1994, until 6:00 A.M., Friday, September 09, 1994, on a weekly scheduled basis, until further notice. Fishing will be allowed up to the regulatory markers at Mensis Point. The Central District and the Castle Cape Section of the Chignik Management Area will open to commercial salmon fishing for 72 hours starting at 12:01 A.M., Tuesday, September 06,1994, until 12:01 A.M., Friday, September 09, 1994, on a weekly basis, until further notice. The Eastern District, and remaining sections in the Western District, and the Perryville District of the Chignik Management Area will open to commercial salmon fishing for 48 hours starting at 12:01 A.M., Tuesday, September 06, 1994, until 12:01 A.M., Thursday, September 08, 1994, on a weekly basis, until further notice.
Closed waters are those regular closed waters as described in the regulations.

-Continued-

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 6:00 A.M., Tuesdays, until 6:00 A.M., Fridays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(b) In the Central District and the Castle Cape Section of the Western District, salmon may be taken from 12:01 A.M., Tuesdays, until 12:01 A.M., Fridays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(c) In the Eastern District, and the remaining sections in the Western District, and the Perryville District, salmon may be taken from 12:01 A.M., Tuesdays, until 12:01 A.M., Thursdays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 6:00 A.M., Tuesdays, until 6:00 A.M., Fridays starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(b) The Central District and the Castle Cape Section of the Western District will be opened to commercial salmon fishing at 12:01 A.M., Tuesdays, until 12:01 A.M., Fridays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(c) The Eastern District, and the remaining sections in the Western District, and the Perryville District will be opened to commercial salmon fishing at 12:01 A.M., Tuesdays, until 12:01 A.M., Thursdays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

(2) Closed waters are those regular closed waters as described in the regulations.

JUSTIFICATION:

Additional opened areas will enable the harvest of coho salmon entering local bays.

-Continued-

EMERGENCY ORDER NO. 4-F-L-22-94

Issued at: Kodiak, AK
September 12, 1994

EFFECTIVE DATE: 12:01 A.M
Tuesday, September 13, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: Until
further notice, or until superseded by subsequent
emergency order.

EXPLANATION:

The commercial salmon fishing regulatory markers in the Ivanof Bay Section of the Perryville District of the Chignik Management Area will be reduced in Ivanof Bay to the old cannery dock across to the northeast cliff point at 55 52'28" N.lat., 159 28'18" W.long.. Other closed waters are those regular closed waters as described in the regulations.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 6:00 A.M., Tuesdays, until 6:00 A.M., Fridays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(b) In the Central District and the Castle Cape Section of the Western District, salmon may be taken from 12:01 A.M., Tuesdays, until 12:01 A.M., Fridays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(c) In the Eastern District, and the remaining sections in the Western District, and the Perryville District, salmon may be taken from 12:01 A.M., Tuesdays, until 12:01 A.M., Thursdays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 6:00 A.M., Tuesdays, until 6:00 A.M., Fridays starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(b) The Central District and the Castle Cape Section of the Western District will be opened to commercial salmon fishing at 12:01 A.M., Tuesdays, until 12:01 A.M., Fridays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

(c) The Eastern District, and the remaining sections in the Western District, and the Perryville District will be opened to commercial salmon fishing at 12:01 A.M., Tuesdays, until 12:01 A.M., Thursdays, starting Tuesday, September 06, 1994, on a weekly basis, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:
(1) Chignik Bay District

-Continued-

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

(2) Ivanof Bay Section of the Perryville District: old cannery dock across to the northeast cliff point at 55 52'28" N.lat., 159 28'18" W.long..

(3) Other closed waters are those regular closed waters as described in the regulations.

JUSTIFICATION:

Additional opened areas will enable the harvest of coho salmon entering local bays.

EMERGENCY ORDER NO. 4-F-L-23-94

Issued at: Kodiak, AK
September 15, 1994

EFFECTIVE DATE: 6:01 A.M
Monday, September 19, 1994

Contact: Alan Quimby
Area Management Biologist

Expiration Date: Until
further notice, or until superseded by subsequent
emergency order.

EXPLANATION:

The entire Chignik Management Area will open to commercial salmon fishing on a weekly scheduled basis for three periods per week at 16 hours per period starting at 6:00 A.M. until 10:00 P.M., Monday, September 19, Wednesday, September 21, and Friday, September 23, 1994, and every Monday, Wednesday, and Friday after that until further notice. Fishing will be allowed up to the regulatory markers at Mensis Point in Chignik Lagoon. The commercial salmon fishing regulatory markers in the Ivanof Bay Section of the Perryville District of the Chignik Management Area will be reduced in Ivanof Bay to the old cannery dock across to the northeast cliff point at 55 52'28" N.lat., 159 28'18" W.long.. Other closed waters are those regular closed waters as described in the regulations.

REGULATION:

5 AAC 15.310 is amended to read:

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken from 6:00 A.M. until 10:00 P.M. Mondays, Wednesdays, and Fridays, starting Monday, September 19, 1994, on a weekly basis, until further notice.

(b) In the Eastern, Central, Western, and Perryville Districts, salmon may be taken from 6:00 A.M. until 10:00 P.M. Mondays, Wednesdays, and Fridays, starting Monday, September 19, 1994, on a weekly basis, until further notice.

5 AAC 15.320 is amended to read:

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) The Chignik Bay District will be opened to commercial salmon fishing at 6:00 A.M. until 10:00 P.M. Mondays, Wednesdays, and Fridays, starting Monday, September 19, 1994, on a weekly basis, until further notice.

-Continued-

(b) The Eastern, Central, Western, and Perryville Districts, salmon may be taken from 6:00 A.M. until 10:00 P.M. Mondays, Wednesdays, and Fridays, starting Monday, September 19, 1994, on a weekly basis, until further notice.

5 AAC 15.350 is amended to read:

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:
(1) Chignik Bay District

(A) Alfred Creek: 500 yard closure applies from August 01 to the end of the commercial salmon fishing season;

(B) Dago Frank Creek: 500 yard closure applies from August 01 to the end of the commercial salmon season.

(2) Ivanof Bay Section of the Perryville District: old cannery dock across to the northeast cliff point at 55 52'28" N.lat., 159 28'18" W.long..

(3) Other closed waters are those regular closed waters as described in the regulations.

JUSTIFICATION:

The fishing period was reduced to a total of 48 hours per week according to the intermediate management plan drawn up last Spring to address the lack of subsistence salmon being taken in the last few years at Clark River, Home Creek, and Hatchery Beach in Chignik Lake. The intermediate management plan was drawn up between the Department, commercial salmon fishers, and subsistence users in the Chignik Management Area per the directives of the Board of Fisheries.

Appendix D. Kodiak tides, 1994.

Date		---HIGH TIDE--- Time	Feet	---HIGH TIDE--- Time	Feet	---LOW TIDE--- Time	Feet	----LOW TIDE--- Time	Feet
May	1	6 : 34 AM	8.2	8 : 07 PM	6.7	0 : 26 AM	2.4	1 : 25 PM	-0.2
	2	7 : 41 AM	7.3	9 : 14 PM	6.7	1 : 36 AM	2.8	2 : 27 PM	0.4
	3	8 : 58 AM	6.7	10 : 17 PM	6.9	2 : 59 AM	2.8	3 : 31 PM	1.0
	4	10 : 18 AM	6.3	11 : 10 PM	7.3	4 : 21 AM	2.5	4 : 32 PM	1.3
	5	11 : 28 AM	6.3	11 : 54 PM	7.7	5 : 28 AM	1.8	5 : 25 PM	1.5
	6	:		12 : 26 PM	6.5	6 : 20 AM	1.2	6 : 10 PM	1.7
	7	0 : 31 AM	8.1	1 : 14 PM	6.6	7 : 03 AM	0.5	6 : 49 PM	1.7
	8	1 : 06 AM	8.4	1 : 56 PM	6.8	7 : 40 AM	-0.1	7 : 25 PM	1.8
	9	1 : 38 AM	8.7	2 : 34 PM	6.9	8 : 15 AM	-0.4	7 : 59 PM	1.9
	10	2 : 10 AM	8.9	3 : 11 PM	7.0	8 : 49 AM	-0.7	8 : 33 PM	2.0
	11	2 : 41 AM	9.0	3 : 47 PM	6.9	9 : 23 AM	-0.9	9 : 06 PM	2.1
	12	3 : 13 AM	8.9	4 : 24 PM	6.8	9 : 58 AM	-0.9	9 : 40 PM	2.3
	13	3 : 45 AM	8.8	5 : 01 PM	6.7	10 : 33 AM	-0.8	10 : 15 PM	2.5
	14	4 : 18 AM	8.6	5 : 41 PM	6.5	11 : 10 AM	-0.6	10 : 54 PM	2.7
	15	4 : 55 AM	8.2	6 : 24 PM	6.4	11 : 49 AM	-0.3	11 : 39 PM	2.9
	16	5 : 37 AM	7.8	7 : 12 PM	6.4	:		12 : 32 PM	-0.1
	17	6 : 29 AM	7.3	8 : 06 PM	6.6	0 : 35 AM	3.0	1 : 20 PM	0.3
	18	7 : 35 AM	6.8	9 : 02 PM	7.0	1 : 43 AM	2.9	2 : 15 PM	0.7
	19	8 : 55 AM	6.4	9 : 57 PM	7.5	3 : 01 AM	2.4	3 : 14 PM	1.0
	20	10 : 18 AM	6.3	10 : 51 PM	8.2	4 : 17 AM	1.6	4 : 15 PM	1.2
	21	11 : 34 AM	6.6	11 : 41 PM	9.0	5 : 24 AM	0.6	5 : 14 PM	1.3
	22	:		12 : 39 PM	6.9	6 : 23 AM	-0.4	6 : 09 PM	1.4
	23	0 : 30 AM	9.7	1 : 37 PM	7.3	7 : 16 AM	-1.5	7 : 02 PM	1.3
	24	1 : 19 AM	10.3	2 : 31 PM	7.6	8 : 06 AM	-2.2	7 : 53 PM	1.3
	25	2 : 06 AM	10.6	3 : 21 PM	7.7	8 : 55 AM	-2.6	8 : 43 PM	1.4
	26	2 : 54 AM	10.6	4 : 11 PM	7.8	9 : 43 AM	-2.7	9 : 32 PM	1.5
	27	3 : 41 AM	10.3	5 : 00 PM	7.7	10 : 30 AM	-2.4	10 : 23 PM	1.7
	28	4 : 30 AM	9.8	5 : 50 PM	7.5	11 : 17 AM	-1.9	11 : 16 PM	2.0
	29	5 : 19 AM	8.9	6 : 41 PM	7.4	:		12 : 04 PM	-1.1
	30	6 : 12 AM	8.0	7 : 34 PM	7.3	0 : 13 AM	2.3	12 : 52 PM	-0.3
	31	7 : 11 AM	7.1	8 : 29 PM	7.2	1 : 17 AM	2.5	1 : 41 PM	0.4
June	1	8 : 18 AM	6.3	9 : 23 PM	7.3	2 : 28 AM	2.5	2 : 33 PM	1.1
	2	9 : 34 AM	5.7	10 : 15 PM	7.5	3 : 43 AM	2.3	3 : 27 PM	1.7
	3	10 : 50 AM	5.5	11 : 02 PM	7.8	4 : 52 AM	1.8	4 : 21 PM	2.2
	4	11 : 56 AM	5.6	11 : 45 PM	8.1	5 : 49 AM	1.2	5 : 13 PM	2.4
	5	:		12 : 51 PM	5.8	6 : 36 AM	0.5	6 : 01 PM	2.5
	6	0 : 25 AM	8.4	1 : 38 PM	6.1	7 : 17 AM	0.0	6 : 45 PM	2.5
	7	1 : 03 AM	8.7	2 : 19 PM	6.3	7 : 55 AM	-0.4	7 : 26 PM	2.5
	8	1 : 39 AM	8.9	2 : 57 PM	6.6	8 : 31 AM	-0.8	8 : 05 PM	2.4
	9	2 : 15 AM	9.1	3 : 34 PM	6.7	9 : 06 AM	-1.1	8 : 44 PM	2.4
	10	2 : 50 AM	9.1	4 : 10 PM	6.9	9 : 41 AM	-1.2	9 : 22 PM	2.4
	11	3 : 26 AM	9.0	4 : 46 PM	6.9	10 : 15 AM	-1.2	10 : 01 PM	2.4
	12	4 : 02 AM	8.8	5 : 23 PM	7.0	10 : 50 AM	-1.1	10 : 43 PM	2.4
	13	4 : 40 AM	8.5	6 : 01 PM	7.1	11 : 27 AM	-0.8	11 : 30 PM	2.4
	14	5 : 23 AM	8.0	6 : 43 PM	7.3	:		12 : 06 PM	-0.4
	15	6 : 14 AM	7.4	7 : 28 PM	7.5	0 : 24 AM	2.3	12 : 48 PM	0.0
	16	7 : 15 AM	6.7	8 : 19 PM	7.8	1 : 27 AM	2.1	1 : 35 PM	0.6
	17	8 : 30 AM	6.1	9 : 14 PM	8.2	2 : 38 AM	1.8	2 : 29 PM	1.2
	18	9 : 56 AM	5.8	10 : 12 PM	8.7	3 : 54 AM	1.1	3 : 30 PM	1.6
	19	11 : 18 AM	5.9	11 : 10 PM	9.2	5 : 05 AM	0.2	4 : 35 PM	1.9
	20	:		12 : 30 PM	6.2	6 : 09 AM	-0.6	5 : 40 PM	2.0
	21	0 : 06 AM	9.8	1 : 30 PM	6.7	7 : 05 AM	-1.4	6 : 40 PM	2.0
	22	1 : 00 AM	10.2	2 : 23 PM	7.1	7 : 57 AM	-2.1	7 : 37 PM	1.8
	23	1 : 51 AM	10.4	3 : 12 PM	7.5	8 : 45 AM	-2.4	8 : 29 PM	1.6
	24	2 : 41 AM	10.4	3 : 58 PM	7.7	9 : 30 AM	-2.4	9 : 20 PM	1.5
	25	3 : 28 AM	10.1	4 : 42 PM	7.9	10 : 13 AM	-2.2	10 : 10 PM	1.5
	26	4 : 14 AM	9.5	5 : 25 PM	7.9	10 : 55 AM	-1.7	11 : 00 PM	1.7
	27	5 : 00 AM	8.8	6 : 08 PM	7.8	11 : 35 AM	-1.0	11 : 51 PM	1.8
	28	5 : 47 AM	7.9	6 : 51 PM	7.7	:		12 : 14 PM	-0.2
	29	6 : 37 AM	6.9	7 : 36 PM	7.6	0 : 45 AM	2.0	12 : 54 PM	0.5
	30	7 : 34 AM	6.0	8 : 23 PM	7.5	1 : 45 AM	2.1	1 : 35 PM	1.3
July	1	8 : 42 AM	5.4	9 : 13 PM	7.5	2 : 52 AM	2.1	2 : 21 PM	2.0
	2	10 : 03 AM	5.0	10 : 06 PM	7.6	4 : 04 AM	1.8	3 : 14 PM	2.6
	3	11 : 22 AM	5.0	10 : 58 PM	7.8	5 : 10 AM	1.4	4 : 14 PM	2.9
	4	12 : 27 PM	5.2	11 : 47 PM	8.1	6 : 06 AM	0.8	5 : 15 PM	3.0
	5	:		1 : 18 PM	5.6	6 : 53 AM	0.2	6 : 10 PM	2.9
	6	0 : 33 AM	8.5	2 : 00 PM	6.0	7 : 33 AM	-0.3	6 : 58 PM	2.7
	7	1 : 15 AM	8.8	2 : 37 PM	6.4	8 : 10 AM	-0.7	7 : 43 PM	2.5
	8	1 : 54 AM	9.1	3 : 12 PM	6.8	8 : 45 AM	-1.1	8 : 25 PM	2.2

-Continued-

Date		---HIGH TIDE--- Time	Feet	---HIGH TIDE--- Time	Feet	---LOW TIDE--- Time	Feet	----LOW TIDE--- Time	Feet
	9	2 : 32 AM	9.2	3 : 46 PM	7.2	9 : 19 AM	-1.3	9 : 05 PM	2.0
	10	3 : 10 AM	9.2	4 : 20 PM	7.4	9 : 53 AM	-1.4	9 : 47 PM	1.8
	11	3 : 48 AM	9.1	4 : 54 PM	7.7	10 : 27 AM	-1.3	10 : 30 PM	1.6
	12	4 : 29 AM	8.7	5 : 30 PM	7.9	11 : 01 AM	-1.0	11 : 16 PM	1.5
	13	5 : 13 AM	8.1	6 : 08 PM	8.1	11 : 38 AM	-0.5	:	
	14	6 : 02 AM	7.4	6 : 51 PM	8.3	0 : 08 AM	1.3	12 : 17 PM	0.1
	15	7 : 01 AM	6.6	7 : 40 PM	8.4	1 : 07 AM	1.2	1 : 01 PM	0.8
	16	8 : 14 AM	5.8	8 : 38 PM	8.5	2 : 16 AM	1.1	1 : 54 PM	1.5
	17	9 : 42 AM	5.4	9 : 43 PM	8.7	3 : 33 AM	0.7	2 : 57 PM	2.1
	18	11 : 11 AM	5.5	10 : 50 PM	9.0	4 : 51 AM	0.1	4 : 11 PM	2.5
	19	12 : 25 PM	5.9	11 : 53 PM	9.4	5 : 59 AM	-0.5	5 : 25 PM	2.5
	20	:		1 : 23 PM	6.5	6 : 57 AM	-1.1	6 : 31 PM	2.2
	21	0 : 51 AM	9.7	2 : 12 PM	7.0	7 : 47 AM	-1.6	7 : 29 PM	1.8
	22	1 : 43 AM	9.9	2 : 56 PM	7.5	8 : 31 AM	-1.9	8 : 21 PM	1.5
	23	2 : 31 AM	9.9	3 : 36 PM	7.9	9 : 12 AM	-2.0	9 : 09 PM	1.2
	24	3 : 16 AM	9.7	4 : 14 PM	8.1	9 : 50 AM	-1.7	9 : 54 PM	1.0
	25	3 : 58 AM	9.2	4 : 51 PM	8.2	10 : 26 AM	-1.2	10 : 38 PM	1.1
	26	4 : 40 AM	8.5	5 : 27 PM	8.2	11 : 01 AM	-0.6	11 : 22 PM	1.2
	27	5 : 21 AM	7.7	6 : 03 PM	8	11 : 34 AM	0	:	
July	28	6 : 04 AM	6.9	6 : 40 PM	7.8	0 : 07 AM	1.4	12 : 07 PM	0.8
	29	6 : 52 AM	6.0	7 : 21 PM	7.6	0 : 58 AM	1.6	12 : 42 PM	1.6
	30	7 : 51 AM	5.3	8 : 09 PM	7.4	1 : 56 AM	1.8	1 : 22 PM	2.3
	31	9 : 10 AM	4.8	9 : 07 PM	7.3	3 : 06 AM	1.8	2 : 12 PM	2.8

Note: To correct tables for local areas add or subtract time for high and low tides and feet for high and low tides.

Note: X Multiply height of district tide by ratio to result, add given correction for total height correction.

	Time		Feet	
Alaska Peninsula:	High	Low	High	Low
Fox Bay, Kupreanof Peninsula	+0:22	+0:36	X0.89	X0.89
Dent Point, Stepovak Bay	+0:21	+0:36	X0.89	X0.89
Albatross Anchorage,				
Balboa Bay	+0:32	+0:43	X0.91	X0.91
Beaver Bay	+0:37	+0:42	X0.87	X0.87
Seal Cape, Coal Bay	+0:34	+0:45	X0.84	X0.84
Ukolnoi Island	+0:41	+0:40	X0.83	X0.83
Dolgoi Harbor, Dolgoi Island	+0:44	+0:40	X0.79	X0.79
Settlement Point, Pavlof Bay	+0:43	+0:48	X0.84	X0.84
Canoe Bay, Pavlof Bay	+1:36	+1:30	X0.76	X0.76
King Cove	+0:40	+0:42	X0.80	X0.80
Lenard Harbor, Cold Bay	+0:46	+0:57	X0.85	X0.85
Cold Bay	+0:49	+1:03	X0.84	X0.84
Morzhovoi Bay	+0:50	+0:43	X0.80	X0.80
Shumagin Islands				
Korovin Island (east side)	+0:26	+0:52	X0.92	X0.92
Sanborn Harbor, Nagai Island	+0:37	+0:37	X0.86	X0.86
Mist Harbor, Nagai Island	+0:35	+0:38	X0.83	X0.83
Pirate Cove, Popof Island	+0:42	+0:43	X0.88	X0.88
Sand Point, Popof Island	+0:30	+0:42	X0.87	X0.87
Zachary Bay, Unga Island	+0:34	+0:49	X0.88	X0.88
Sanak Islands				
Peterson Bay	+0:29	+0:32	X0.73	X0.73
Sanak Harbor	+0:48	+0:43	X0.78	X0.78
Unimak Island				
Dora Harbor	+0:49	+0:55	X0.77	X0.77
Ikatan Bay	+0:43	+0:45	X0.78	X0.78

Appendix E. 1994 Chignik Management Area Salmon Regulations.

CHIGNIK AREA

CHAPTER 15. - CHIGNIK AREA

ARTICLE 1. - DESCRIPTION OF AREA

5 AAC 15.001. APPLICATION OF THIS CHAPTER. Requirements set forth in this chapter apply to commercial fishing only, unless otherwise specified. Subsistence fishing regulations affecting commercial fishing vessels or affecting any other commercial fishing activity are set forth in the subsistence fishing regulations in 5 AAC 01 and 5 AAC 02.

5 AAC 15.100. DESCRIPTION OF AREA. The Chignik Area includes all waters of Alaska on the south side of the Alaska Peninsula enclosed by 156°20'13" W.long., (the longitude of the southern entrance to Imuya Bay near Kilokak Rocks) and a line extending 135° southeast from Kupreanof Point.

ARTICLE 2. - FISHING DISTRICTS

5 AAC 15.200. FISHING DISTRICTS. (a) The Eastern District includes all waters from the southernmost marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik Area

(1) Agripina Section: all waters between Kilokak Rocks at 57°11'22" N.lat., 156°20'12" W.long., and Cape Providence at 56°58'40" N.lat., 156°33'28" W.long.;

(2) Chiginagak Section: all waters between Cape Providence at 56°58'40" N.lat., 156°33'28" W.long., and Cape Kuyuyukak at 56°53'54" N.lat., 156°49'43" W.long.;

(3) Nakalilok-Yantarni Section: all waters between Cape Kuyuyukak at 56°53'54" N.lat., 156°49'43" W.long., and Cape Kunmik at 56°45'53" N.lat., 157°11'53" W.long.;

(4) Big River Section: all waters of Amber and Aniakchak Bays bounded by 175°11'53" W.long., and the latitude of the southernmost marker 500 yards from the mouth of Aniakchak Lagoon;

(b) The Chignik Bay District includes all waters of Chignik Bay and Lagoon west of a line from Jack Point at 56°18'17" N.lat., 158°14'54" W.long., to Neketa Creek at 56°24'10" N.lat., 158°27'37" W.long.

(c) The Western District includes all waters south and west of Jack Point at 56°17'32" N.lat., 158°11'56" W.long., excluding the waters of Chignik Lagoon, to Coal Cape at 55°53'28" N.lat., 159°00'20" W.long.

(1) Castle Cape Section: all waters between Jack Point at 56°17'32" N.lat., 158°11'56" W.long. and Cape Ikti at 55°58'45" N.lat., 158°30' W.long.;

(2) Dorner Bay Section: all waters between Cape Ikti at 55°58'45" N.lat., 158°30' W.long., and a point on the west side of Dorner (Kuiukta) Bay's entrance at 55°57' N.lat., 158°40' W.long.;

(3) Mitrofania Section: all waters, including Mitrofania Island between a point on the west side of Dorner (Kuiukta) Bay's entrance at 55°57' N.lat., 158°40' W.long., and Stirni Point at 55°54'50" N.lat., 158°55' W.long.;

(4) Anchor Bay Section: all waters between Stirni Point at 55°54'50" N.lat., 158°55' W.long., and Coal Cape at 55°53'28" N.lat., 159°00'20" W.long.

(d) The Perryville District includes all waters between Coal Cape at 55°53'28" N.lat., 159°00'20" W.long. and Kupreanof Point at 55°33'55" N.lat., 159°35'50" W.long.

(1) Perryville Section: all waters including Chiachi Islands, between Coal Cape at 55°53'28" N.lat., 159°00'20" W.long., and Coal Point at 55°51'31" N.lat., 159°18'50" W.long.;

(2) Humpback Bay Section: all waters including Paul and Jacob islands, between Coal Point at 55°51'31" N.lat., 159°18'50" W.long., and Alexander Point at 55°47'22" N.lat., 159°24'34" W.long.;

(3) Ivanof Bay Section: all waters between Alexander Point at 55°47'22" N.lat., 159°24'34" W.long., and Kupreanof Point at 55°33'55" N.lat., 159°35'50" W.long.

(e) The Central District includes all waters, excluding the waters of the Chignik Bay District between a point near Jack Bay at 56°18'17" N.lat., 158°14'54" W.long., and the southernmost marker 500 yards from the mouth of Aniakchak Lagoon.

(1) Cape Kumlik Section: all waters, including Sutwik Island, between the latitude of the southernmost marker 500 yards from the mouth of Aniakchak Lagoon and 157°40'25" W.long., on the southwest side of Cape Kumlik;

(2) Kujulik Section: all waters between a point on the southwest side of Cape Kumlik at 56°36'32" N.lat., 157°40'25" W.long., and a point on Cape Kumliun at 56°28'34" N.lat., 157°51'26" W.long.;

(3) Outer Chignik Bay Section: all waters including Nakchamik Island between a point on Cape Kumliun at 56°28'34" N.lat., 157°51'26" W.long., and a point near Jack Bay at 56°18'17" N.lat., 158°14'54" W.long., excluding the Chignik Bay District.

ARTICLE 3. - SALMON FISHERY

5 AAC 15.310. FISHING SEASONS. (a) In the Chignik Bay District, salmon may be taken only from June 1 through October 31.

(b) The Perryville, Western, Central, and Eastern districts are opened by emergency order.

5 AAC 15.320. WEEKLY FISHING PERIODS. (a) Salmon fishing periods shall be established by emergency order.

5 AAC 15.330. GEAR. (a) Salmon may be taken only by purse seine or hand purse seine.

5 AAC 15.332. SEINE SPECIFICATIONS AND OPERATION. (a) In the Eastern, Central, Western and Perryville districts, no purse seine less than 100 fathoms or more than 225 fathoms in length may be used.

(b) In the Eastern, Central, Western, and Perryville districts, no hand purse seines less than 100 fathoms or more than 225 fathoms in length may be used.

(c) In the Chignik Bay District, purse seines and hand purse seines may not be less than 100 fathoms or more than 125 fathoms in length.

(d) No seine may be less than three fathoms nor more than 375 meshes in depth; in addition, up to twenty-five meshes of chafing gear with a maximum mesh size of seven inches may be used.

(e) No lead may be more than 75 fathoms in length. The aggregate length of seine and lead may not be more than 225 fathoms in the Eastern, Central, Western, and Perryville districts.

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(f) When a purse seine or hand purse seine is in the water for the purpose of taking fish, the seine shall be attached to the licensed vessel operating the gear.

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon

(A) southwest of a line from the tip of Hume Point to the north side of Chignik Island (56°17'25" N.lat., 158°35'30" W.long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56°16'38" N.lat., 158°34'54" W.long.);

(2) Kilokak Rocks Bay: northwest of a line from the southern entrance of the bay at 57°09'50" N.lat., 156°20'40" W.long., then to the opposite shore 500 yards northeast of the mouth of Kilokak Rocks Creek at 57°10'07" N.lat., 156°20'40" W.long.;

(3) Agripina River: west of a line from 57°06'46" N.lat., 156°28' W.long., to 57°06'35" N.lat., 156°28'30" W.long.;

(4) Chiginagak Bay: north of a line from 57°00'33" N.lat., 156°45'38" W.long., to 57°01'48" N.lat., 156°41'51" W.long.;

(5) Nakalilok Lagoon: the lagoon and within 500 yards of the entrance:

(6) Yantarni Lagoon: the lagoon and within 500 yards of the entrance:

(7) Aniakchak River: northwest of a line from approximately 500 yards northeast of the mouth at 56°45'43" N.lat., 157°28'46" W.long., to a marker on the southern tip of the island directly off the mouth and then to approximately 1,000 yards southwest of the mouth at 56°45'20" N.lat., 157°31' W.long.;

(8) Aniakchak Lagoon: the lagoon and within 500 yards of the entrance;

(9) Kujulik Bay: the southwest end of the bay southwest of a line from 56°35'51" N. lat., 157°59' W. long., to the opposite shore at 56°34'30" N. lat., 157°57'30" W. long.;

(10) Portage Bay: west of a line from 56°11'40" N.lat., 158°33' W.long., to 56°10'38" N. lat., 158°33' W. long.;

(11) Ivan Bay: north of a line from the marker on the northwest shore 1,000 yards from the stream mouth to the marker on the southeast shore 750 yards from the stream mouth;

(12) Humpback Bay: within 1,000 yards of the terminus of Humpback Bay stream (275-502) at 55°51'30" N.lat., 159°20' W.long.;

(13) Ivanof Bay: all waters northwest of a line from a point on the northeast shore at 55°52'28" N. lat., 159°28'18" W. long. to a point on the north end of the spit at 55°51' N. lat., 159°30'54" W. long. (all waters northwest of Round Island are closed);

(14) Alfred Creek (271-104): before August 1, the 500 yard closure at the terminus does not apply; the 500 yard closure does apply from August 1 to the end of the salmon fishing season;

(15) Dago Frank Creek (271-105): before August 1, the 500 yard closure at the terminus does not apply; the 500 yard closure does apply from August 1 to the end of the salmon fishing season;

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(16) Hook Bay: northwest of a line from the tip of Hook Bay Spit at 56°30'07" N.lat., 158°08'04" W.long., to a point on the north side of the bay at 56°31'07" N.lat., 158°07'32" W.long.

(17) Unnamed stream at 55°49'02" N.lat., 159°24'15" W.long.; the 500 yard closure at the terminus does not apply.

(18) Lake Bay: all waters southwest of a line drawn at the entrance to Lake Bay at 56°18'51" N. lat., 158°17'30" W. long. extending across the entrance to Lake Bay;

(19) Mud Bay: all waters southwest of a line from 56°19'28" N. lat., 158°25'12" W. long. extending across the entrance to Mud Bay.

5 AAC 15.355.REPORTING REQUIREMENTS. (a) The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

(b) A commercial fisherman shall report, on an ADF&G fish ticket at the time of landing, the number of salmon taken but not sold.

5 AAC 15.360. EASTERN DISTRICT SALMON MANAGEMENT PLAN. (a) The department shall open and close the Eastern District for commercial salmon fishing concurrently with the Chignik Bay and Central districts. The department may close the Eastern District for the period between the first (Black Lake) and second (Chignik Lake) sockeye salmon runs.

(b) The department shall close the Eastern District on July 15 to allow evaluation of the strength of the pink and chum salmon runs.

(c) The department shall close the Eastern District when it determines that the salmon being harvested in that district are from stocks that do not originate from spawning areas located in the Chignik Area.

Appendix F. Chignik Management Area Herring Regulations.

ARTICLE 9. - STATISTICAL AREA L

CHIGNIK AREA.

5 AAC 27.550. DESCRIPTION OF AREA. Statistical Area L includes all waters on the south side of the Alaska Peninsula enclosed by 156°20'13" W. long. (the longitude of the southern entrance to Imuya Bay near Kilokak Rocks) and a line extending southeast (135°) from the southernmost tip of Kupreanof Point.

5 AAC 27.555. DESCRIPTION OF DISTRICTS. Districts are as described in 5 AAC 15.200.

5 AAC 27.560. FISHING SEASONS AND WEEKLY FISHING PERIODS. (a) Herring may be taken from April 15 through June 30 (sac roe season) and from August 15 through February 28 (food and bait season).

(b) Herring may be taken only during periods established by emergency order.

5 AAC 27.565. GEAR. (a) Herring may be taken only by purse seines.

(b) A herring fishing vessel may operate or assist in operating only one legal limit of herring fishing gear in the aggregate.

(c) Unhung gear sufficient for mending purposes may be carried aboard fishing vessels.

(d) Herring fishing nets shall be measured, either wet or dry, by determining the maximum length of cork line when the net is fully extended with traction applied at one end only.

(e) The interim-use or entry permit holder is responsible for operation of the net.

(f) The use of leads with any net gear used for commercial herring fishing is prohibited during the herring sac roe season.

5 AAC 27.575. SEINE SPECIFICATIONS AND OPERATIONS. No purse seine may be more than 1,000 meshes in depth or more than 100 fathoms in length.

5 AAC 27.580. WATERS CLOSED TO HERRING FISHING. During the period June 12 through October 31, herring may not be taken in waters described in 5 AAC 15.350 and 5 AAC 39.290.

5 AAC 27.590. BUYER AND TENDER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

(1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing herring;

(2) make daily reports of all herring purchased from fishermen, and other processing records as specified by a local representative of the department, and

(3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.